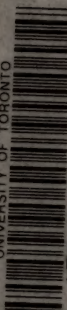


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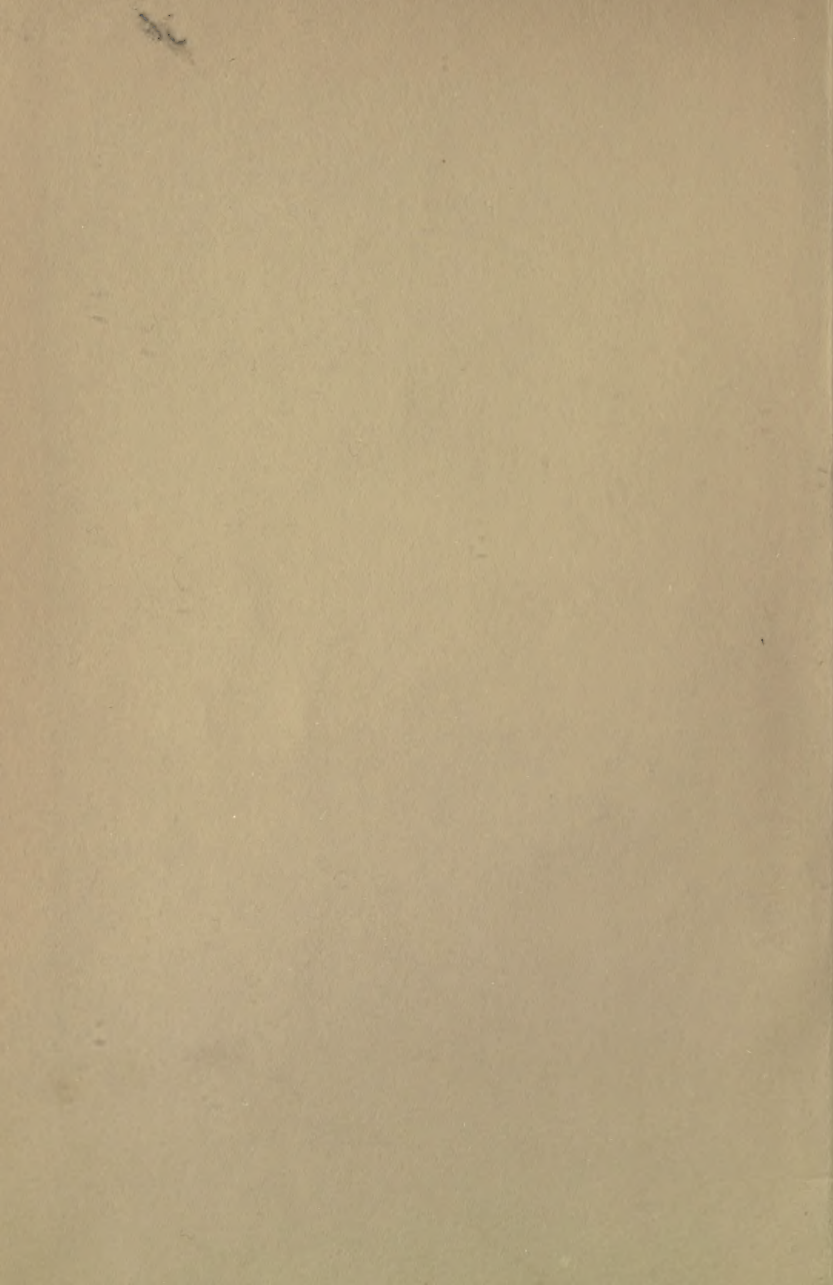
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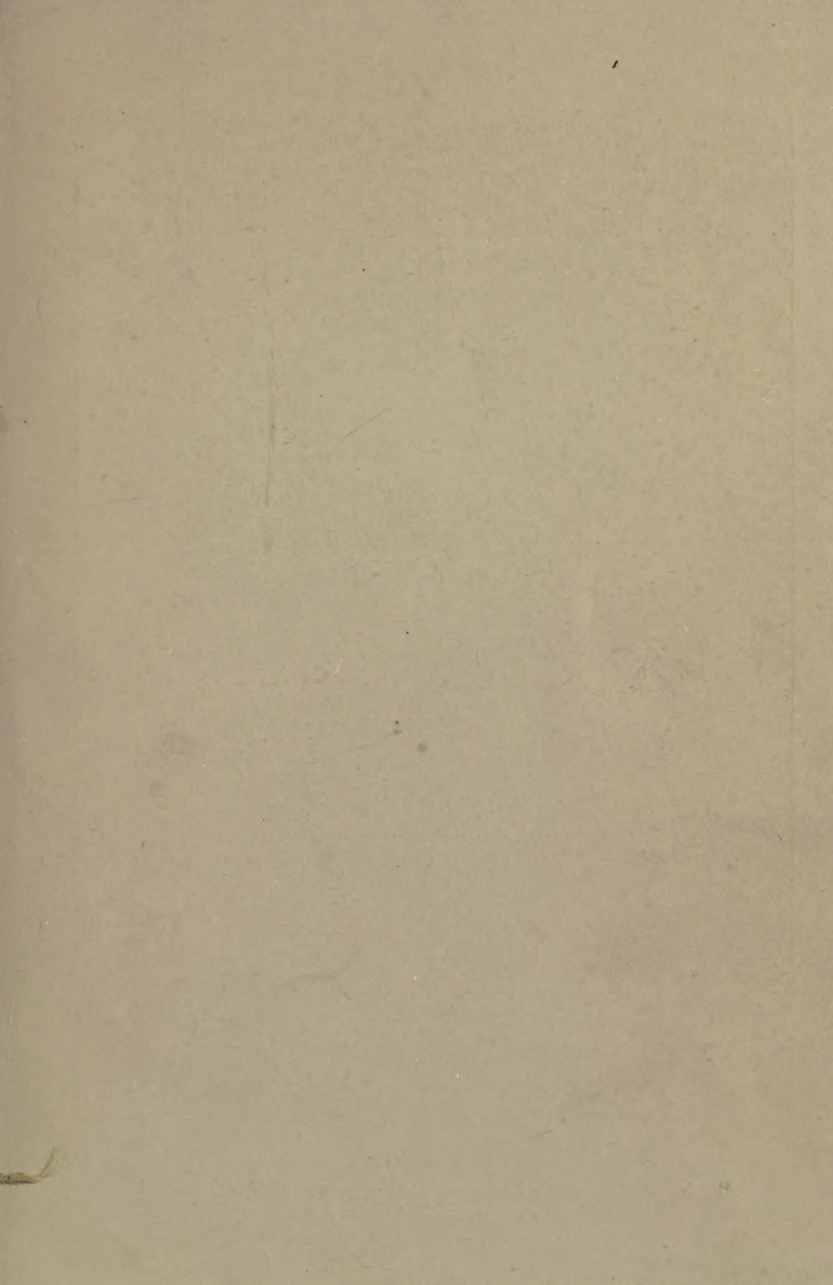
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BILLIARDS

CHAPTER I

ORIGIN OF THE GAME

THE precise origin of the game of English billiards is lost, not exactly in the mists of antiquity, but certainly in the mists of our own history. Shakespeare's attempt to put a cue into the hands of Cleopatra is often quoted, but concerning it the learned Malone says tersely: "——; 'let us to billiards.' This is one of the numerous anachronisms that are found in these plays. This game was not known in ancient times." Most probably, Shakespeare's reference was inspired by the popularity of billiards among the gallants and fair ladies of the court of the period in which his play was written, about 1608. This inference is of considerable interest to

students of billiard lore, as it shows that when the game was young it was enjoyed by both sexes. There can be no doubt that Shakespeare had this point in mind when he wrote the passage mentioned, as when Charmian pleads a sore arm as an excuse for not playing, and suggests that his place should be taken by one of the lady attendants, Cleopatra's remark in favour of a "mixed" game is human enough to be worth seeking in the original. From this it is indisputable that ladies have by ancient right a just claim to play billiards, a claim also supported by more than one curious old print; and it will be a splendid thing for billiards when the ladies make up their minds to enjoy to the full their handsome heritage in the "game beautiful." This digression into Shakespearean billiards raises another interesting point. When he mentions the game the poet is depicting Cleopatra as seeking diversion while waiting anxiously for news of Antony, and we lovers of billiards may surely accept this as yet another instance

of the Bard of Avon's supreme insight into every phase of human feeling. The game of billiards is essentially the one recreation above all others which possesses the desirable power of taking its devotees away from themselves for the time being, and it is pleasing to note that as far back as Shakespeare's time this attribute of billiards was pronounced enough to induce him to make a queen pining for her lover exclaim : " Let us to billiards."

Other attempts to place a remote historical date on the origin of billiards have not succeeded where Shakespeare failed. Even from America we have nothing better than statements concerning Cathin More, King of Ireland, leaving "fifty billiard balls of brass, with the pools and cues of the same materials," when he died in A.D. 148, and in the face of such an assertion it seems rather a waste of time to give serious attention to attempts to trace the origin of billiards back to very early periods in the history of the white races of mankind. We might as well

attempt to father the game on the Chinese nation, not only because of the complete safety with which the first invention of almost anything can be "ascribed to the Chinese," but also because there is extant an old print of "a Chinese billiard-table"—a round one—which must surely have been overlooked by sundry veracious chroniclers who seem willing enough to trace billiards back to the dawn of time, if needs be, with less fact to support them than that afforded by the old engraving in question. The truth is that satisfactory evidence regarding the extreme antiquity of billiards does not exist, and that Malone's comment, "This game was not known in ancient times," is all that any scholar or historian of repute would care to say on the subject.

Place as well as time is in dispute when an attempt is made to settle the origin of billiards. The first account of the game is in French, and dates back to 1665. A few years later Cotton states that "Billiards from Spain first derived its name," and

from this it is evident that no mean case can be made out in favour of the supposition that the game came from somewhere on the Continent. Dr. Johnson, however, declared that both the word "billiards" and the game itself originated in England, and there may be, as Boswell would say, "internal evidence" that our massive autocrat of the after-dinner table had exceptional reasons for his definition of billiards. He played no games, not even draughts or cards, and the condition of his sight rendered it highly improbable that he ever even looked at a billiard-table. But there can be no doubt that he regretted his inability to participate in indoor recreations, which might have helped him to fight down the fits of melancholy and depression with which his life was overcast, and from the way the point is handled by Boswell it is permissible to infer that Johnson sought what consolation he could obtain from reading about games.

If this be reasonable, and few sympathetic

students of Johnson would take serious exception to the surmise, we billiard enthusiasts may surely infer that this great master of our language knew at least as much as his critical commentators when he gave billiards both in name and reality to his native land. Again, there is the important fact that Johnson lived in times much nearer the beginning of billiards in this country than we do to-day. Most probably, not more than three long lives divided Johnson in his prime from that period which saw the dawn of billiards in our land, and he may well have conversed with the great-grandchildren of men who were the first to strike a billiard ball in England.

Altogether, it is safe to conclude that Johnson had exceptional facilities for knowing the truth about the origin of billiards, and reasonable to infer that circumstances connected with his life induced him to make good use of such facilities. His well-known regard for truth must also be mentioned, and we may

take it for granted that his definition of billiards as English all through is, although open to question, as near the truth as we are ever likely to get concerning a subject on which no conclusive historical data have so far rewarded more than a little patient research. But although the exact origin of billiards cannot be traced clearly enough to make any unqualified assertions concerning it, yet we may say that the balance of available evidence supports the Johnsonian definition ; and we can quit this phase of the subject with the remark that the most defensible theory regarding the origin of billiards is that the game began in England and was first played about the middle of the sixteenth century.

If, however, the word "origin" is to be taken in a Darwinian sense, and an attempt made to trace billiards back to the elements from which it was evolved, the task takes us into many countries and times, and bids us digress into enough literature to furnish a quaint and far from meagre library. This prospect, pleasing

as it might be to a cultured enthusiast of means and leisure enough to enable him to devote years of his life to producing a volume on the subject, can only be glanced at in a work of this description. To indulge in a rather hasty generalization, it may be said that billiards is derived from outdoor games of the croquet or bowls type welded to indoor games of the shovel-board variety. This theory supports the English origin of the game. We know that "clossh," an outdoor game in which a ball had to be driven through a hoop or ring by means of a "spade or chisel-shaped instrument," was played by our ancestors as far back as the thirteenth century, and that King Henry VIII lost large sums of money at "shovilla bourde"—of which the modern "shuv-'apen'y" is the direct and degenerate descendant. It is reasonable enough to suppose that these two games were played for centuries in their appropriate seasons, the one in summer, the other in winter. Now our English climate comes to our assistance,

as it does not require a very lively imagination to see that our weather on its worst summer behaviour must have provided seasons when "cosh" suffered much as cricket does to-day. Consequently the "shovel-board" was brought into unwelcome prominence at a time when the "cosh" enthusiasts would fain have enjoyed their favourite sport, and by a permissible flight of fancy we may suppose that one wet day in summer, probably during the reign of Elizabeth, some sportive genius thought of combining the two games to the advantage of weatherbound "cosh" players. It may well be that accident played its part in this grand discovery, that some "cosh" expert, greatly daring, rolled a ball on the shovel-board just to see what would happen, and thus gave to the world the germ of billiards. The idea is alluring, but only Charles Lamb dare take it further—his "Dissertation upon Roast Pig" compels the ardent wish that the gentle Elia had been moved to immortalize in a

similar strain the happy accident which may easily have been the primary means by which ball, stick, and table were first brought together to form the rude but direct ancestor of the billiards of to-day. When once the grand idea of a ball game upon a table was evolved, the transition into billiards was doubtless rapid, and from this period we can trace the development of the game with comparative certainty ; as, however little we may know concerning billiards in the egg, there is no lack of evidence regarding billiards in the chick.

Old White, writing in 1807, tells us almost all that need be said about the growth of billiards up to the commencement of the nineteenth century. He states : “ The game was, for a long time after its invention, played in a very different manner from what it is at present ; a pass or bar of iron being fixed on the table, through which the balls at particular periods of the game used to be passed ; but now this method is almost universally laid aside.

“ The game at billiards is played by two or four people with ivory balls upon a table, which in different countries is made of different shapes. In some parts of the Continent a round or oval form is most in use, in others nearly a square one; but the shape almost universally employed in this country is the oblong, in size from nine to twelve feet long, and from four to six wide. It is covered with a smooth green cloth, surrounded with a raised edge or border, which is lined with a stuffed elastic pad, denominated the cushion, and furnished with six pockets, four of which are situated at the four angles, and two midway in the length of the sides. The table has an upper and a lower part; across the upper part is drawn a line, the space within which is called the baulk, and within the baulk is described a ring, or semicircle, termed the striking-point.

“ Either two, three, four, five, or six balls are employed, according to the particular game. Of these, two are white, the others are distinguished from each

other by appropriate colours ; and of the white ones, a black spot is attached to one as a mark of distinction, one of these being allotted to each player, or to each party, and the coloured balls being considered neutral, or common to both.

“The instruments employed for the purpose of striking the balls are two : the cue and the mace. The former of these is a long round stick, usually made of ash, and shaped in the form of a cone, being broad at one end, and at the other converging to a narrow flattened or rounded point. The latter consists of a slender rod, with a thick piece of mahogany or other wood affixed to its extremity, and adapted to it at such an angle as to rest flat upon the table while the stick is held up to the shoulder in the act of striking. The under side of this is flat and smooth, in order that it may move with facility over the cloth ; the upper is concave, and the end to be opposed to the ball is plain and broad.”

It will be noticed that the cue described by White had no tip, from which it is

EVOLUTION OF THE GAME 13

obvious that this indispensable adjunct to scientific billiards is much more recent in its origin than might be supposed. Joseph Bennett, in his "Billiards," edited by "Cavendish," says: "About 1807 the leathern tip was invented by a professional player, a Frenchman named Mingaud." But if this was the case, it is at least singular that White, a contemporaneous authority, does not mention the circumstance; nor is it noticed in any of the occasional references to billiards made by officers who served during the Napoleonic wars; and it is difficult to conclude that such keen sportsmen as army officers would have failed to notice an important innovation in a game they liked well enough to play on active service. It is, of course, reasonable to surmise that the tipless cue survived for a long time in general use after the advantage of a leathern tip was known and appreciated by a select few at the top of the game, as it is wonderful how tenaciously the old order of things was adhered to in billiards. Even as recently

as 1866 the mace formed a recognized part of the equipment of a billiard-room, for we find the renowned Captain Crawley writing: "The mace is a hammer-headed cue, thin and light in the stem. It is now very little used, even by ladies. With a mace it is impossible to make high, low, or side strokes; or, in fact, to hit the ball in any other than a straight-forward manner."

The advent of the tipped cue stimulated progress in other directions, and list cushions, wooden beds, and coarse baize cloths were gradually displaced by rubber cushions, slate beds, and cloths of good quality. It would be tedious to detail the many technical points connected with this era of progress, but it is only just to say that much of the important work accomplished during this period owed its inspiration to Edwin Kentfield. He found the table and implements of the game crude, almost coarse, and left them at his death in 1873 in a condition somewhat approximate to the perfection of to-day.

EVOLUTION OF THE GAME 15

Since the era of Kentfield the main improvements have been in the direction of making cushions lower and tables faster, and progress in these things has been so consistent and rapid that it is impossible to wish for more perfect means towards the enjoyment of a game than that afforded by the best billiard-table makers of the present time. The Kentfield period also saw the dimensions of a full-sized billiard-table settled at twelve feet by six, instead of the "from nine to twelve feet long, and from four to six wide," described by White. Regarding the height of the table, however, it appears that in recent years there has been a disposition to make the table rather lower. The Billiards Control Club rule is that "the height of the table from the floor to the top of the cushion-rail shall be from two feet nine inches to two feet ten and a half inches," but in the sixties a leading authority wrote: "The proper height of a full-sized table is three feet from the floor to the top of the cushions."

The evolution of the pockets has undoubtedly provided more controversy than any other point connected with the make and shape of a billiard-table. No pronounced deviation from the ordinary type was noticeable until the spot stroke became a prolific means of scoring. Then we find that Kentfield had his tables at Brighton fitted with three-inch pockets to stop this stroke, which he favoured so little that he termed it "not billiards." This type of table was selected by the leading professionals who drew up the rules for the first championship matches, their decision being—"That the pockets be three inches wide at the fall of the slate," and every one of the sixteen contests for the championship which took place between January 1870 and June 1885 was played on a table of this description. But outside championship billiards the three-inch-pocket table made little headway except among a select group of keen enthusiasts, and the game was faced by the awkward fact that two types of table

were becoming standardized, the one for championships and the other for ordinary play. To obviate this anomaly, standard pockets measuring three and five-eighths inches at the fall of the slate were introduced, and templates prepared to ensure that the shape of the pocket openings was identical on standard tables. This plan is still in force, and it is gratifying to note that the standard table gains ground every year. The ordinary table, by which is meant any table with pockets easier than standard type, is never used for any contests of importance, either amateur or professional; and the result is that those who wish to play billiards under first-class conditions must accustom themselves to standard pockets. This is no hardship to any amateur who takes an intelligent interest in billiards, as the terrors of the standard pocket are largely imaginary and soon vanish after a short acquaintance with a standard table. This is true of players of every degree of skill, and it may

be asserted that the ordinary table would have disappeared long since but for the mistaken notion that only the best players can hope to score on standard tables. How very mistaken this idea is may be judged from the fact that in popular clubs annual handicaps are usually played on a standard table, which would scarcely be the case if standard pockets appealed solely to the best of players.

Much might be written about the origin and growth or the rules of billiards ; but at the risk of skipping some interesting and amusing matter, we prefer to pass the period of the "port" and "king," and "winning" and "losing" hazard games, and come direct to the three-ball game, identical in its essentials with the billiards of the present time. Here we find that in spite of much outcry concerning continual tinkering with the rules of billiards, there has been but little alteration except in form and detail for very many years. We have before us a copy of the rules published by Kentfield in 1839, and in the

average billiard-room of to-day they would serve well enough to govern five games out of six, perhaps more. The spot and push stroke are not barred, nor are cannons or misses limited, and this is about the sum total of essential difference between the rules of Kentfield and those we play under, always excepting the important and commendable B.C.C. rule which gives the referee in a billiard match the right to act on his own initiative if he observes any infringement of the rules. The limitation of consecutive red winning hazards from the billiard spot, commonly termed the "spot-barred game," became necessary when great spot-stroke players, of whom the elder Peall was the best, obtained such mastery of the stroke that the game suffered as a spectacle. But it is very much open to question whether the universal application of the rule was justifiable in the best interests of billiards. The stroke is a sound and clever one, and so difficult in its execution that few, if any, amateurs were ever likely to acquire undue

proficiency "on the spot"; and it seems absurd and unjust that because of the superhuman skill of the few that lived by playing the game the legitimate ability of the multitude who play for sport should be handicapped and their pleasure curtailed. The force of this argument has been recognized by the Council of the B.C.C., and we have the rule which states that "Spot-stroke play may, if the players agree, be arranged for." This concession seems to point the way towards that ideal set of rules all cuemen desire, and which may eventually take the form of rules permitting every fair stroke to be played to the full, with "championship conditions" attached as an appendix for the express purpose of defining such limitations of any particular stroke as the inordinate proficiency of one or two players might render necessary. Then, without tampering with the standard rules of the game, a ready means would be available of dealing with any stroke which interfered with public interest in the game as a spectacle,

as we may be sure that the leading lights of the billiard profession would play under "championship conditions" at all times, leaving the rules of billiards proper and complete to govern enjoyable sporting contests between countless thousands who have not and never will have the slightest pretensions to championship class.

The push stroke was rightly abolished. It never was anything but foul, and a glaring foul at that. As regards the limitation of consecutive misses to two, this B.C.C. rule may certainly plead justification by results, as it has brightened the game up to no inconsiderable extent and rendered safety play a finer art than it ever was before the rule came into force, which is indeed saying a very great deal. The limitation of consecutive ball-to-ball cannons was rendered imperative by the notorious "anchor" stroke, and is a matter which is not likely to affect the game of amateur exponents. Possibly, for this reason, it is fair to urge that the limit might well be increased to fifty, as

it is arguable that if a professional exponent is clever enough to master the close cannon game he ought to be allowed to make a hundred points in one break before the rules put an end to his sequence of ball-to-ball cannons. The strokes are fair, and surely pretty and delicate enough to be worth watching while a hundred points are added to the score. Some limitation of close cannons, for preference as a "championship condition," is undoubtedly necessary in the best interests of English billiards, but there is much to be said in favour of the plea that the limitation should not be enforced with such severity as to render specialization in this delightful phase of billiards unremunerative to the professional.

Turning to penalties for breaking rules, as distinct from the rules themselves, it is not too much to say that for a very long time the variety of alternative penalties for infringements bewildered even the experts, and were utter Greek to the vast majority of players. Only such penalties

as resulted in the award of points to the non-striker were at all understood by the billiard world in general, but when such penalty was accompanied by a foul, or when a foul was committed which gave no points away, not one marker in a hundred could say off-hand exactly what punishment fitted the crime, and reference to the rules too often made confusion worse confounded. All this was swept away by the B.C.C. rule which states that "For a foul stroke the striker cannot score, and is liable for any further penalty which may be incurred in the same stroke. His ball shall be placed on the centre spot, the red shall be spotted, and his opponent shall play from the D." This simple rule works extremely well in practice, and constitutes what is perhaps the most distinct advance in the billiard legislation of our time. The pity is that its universal adoption cannot be hoped for until the government of billiards and kindred games is vested in one body. This brings us to a highly controversial topic

which cannot be discussed in a work of this description, but is nevertheless of such importance that it cannot be entirely ignored. There is no need to indulge in an historical retrospect of the various causes which led up to that dual control of billiards so universally deplored by sportsmen who love the game for itself alone. It is far better to allow a past full of bitterness and personal feeling to bury itself in deserved oblivion, and to look forward with hope to the day when unison will prevail among those who govern billiards even as it does among the multitudes of good sportsmen who play the game for its own sake. One thing is certain: this division of control cannot continue indefinitely—the marvel is that it has lasted so long. Really, so far as billiards is concerned, the points of difference between the Billiard Association and the Billiards Control Club are not worth mentioning. What does matter is mostly personal feeling; that is the real animating force responsible for the con-

tinuance of the split ; and to the positive first-hand knowledge of the writer this point of difference was once narrowed down to such an extent that peace in the billiard world was virtually in the hands of three or four men. Surely it is not too much to hope that billiard history will repeat itself in this respect, and that when the passage of time and the trend of events again favour the possibility of peace with honour the opportunity will be handled with an amount of tact, sympathy, generosity, and human feeling worthy of one of the finest recreations known to mankind.

CHAPTER II

HISTORY OF THE GAME

WE now propose to touch upon the history of billiard playing. This is quite recent, its most important developments took place well within the memory of living men; and it is best chronicled by blending with it notes on those cuemen who have been mainly instrumental in making English billiards the splendid game it is. It seems almost superfluous to remark that nothing much was accomplished prior to the introduction of chalk, cue-tips, and rubber cushions. Then, as old White proves, billiards was nothing but a collection of crude, plain-ball strokes, frequently of the forcing variety. In one respect, however, these old-time players seem to have acquired greater proficiency than we moderns. White tells of an

THE "DOUBLET HAZARD" 27

adept who doubled the red ball thirty times in succession into "one of the upper holes," and from his fearful and wonderful diagrams it is easy to see that the "doublet hazard," as the stroke was then termed, was quite a speciality a century or so ago. Then, no doubt, players were driven to make much of the "double," as it must have been a most artistic refinement in a game which knew nothing of side or screw effects. The stroke was helped by the fact that the old list cushions gave the angle of reflection without variation no matter what pace the cue ball was travelling at, and it may well have been that the "holes" of the period were easier than the pockets of to-day. But when every allowance is made, it appears only fair to conclude that our billiard ancestors knew from practical everyday experience far more about doubling a ball than we do, always excepting the select few who make a real study of various pool games.

With the advent of chalk and cue-tips

the name of Jack Carr comes into prominence. This 'worthy was a marker at Bath, and although it may be an open question as to whether he or his employer, Mr. Bartley, originally discovered the effect of side on a billiard ball, there can be no doubt that Carr was the first to exploit it with any pronounced degree of success. This made him the first champion, as on February 17, 1825, he was matched to play five games of a hundred-up against "The Cork Marker" for seventy-five guineas. He won the first three games off the reel, and as an offer to back him against all comers for one hundred guineas a side was made on the spot, his claim to be written down as the first champion of English billiards must be allowed to pass. A curious account of this first match for the championship appeared in the *Annals of Sporting and Fancy Gazette*, from which we learn that "in the second game Carr made twenty-two hazards off the red ball on the spot successively." "Twenty-two, indeed," comments the editor. "We have

seen him make thirty-five in succession off the red ball," from which it appears that Carr was not giving of his best on this occasion. Be this as it may, the Bath marker undoubtedly understood the spot stroke as well as the utility of screw and side, and it is a pity that no reliable details of his scoring methods have come down to us. Edwin Kentfield, better known as "Jonathan," took up the challenge made by the backer of Carr, but the match never came off owing to Carr's illness, and Kentfield assumed the title of champion and held it without dispute for twenty-four years.

As stated in our previous chapter, Kentfield gave the game a great impetus by suggesting many notable improvements in tables and implements. What he did as a player pure and simple can only be held to barely justify his retention of the championship for nearly a quarter of a century. We know that Kentfield's best break was one of 196, and that his spot record was fifty-seven consecutive hazards;

and as he played no important professional matches in public it is safe to assume that these records were set up on his own tables against insignificant opponents. This form does not place Kentfield so very far ahead of Carr at his best, if that editorial note concerning the Bath marker's thirty-five spot hazards may be accepted as authentic; and, in spite of the gushing tributes of Mardon, we are inclined to conclude that Kentfield both gained and retained championship honours without making an adequate amount of billiard history. We can judge him very well as a player from his book on billiards, from which it is obvious that he believed in a very open game and went for the stroke without, in a modern sense, due regard to after position. In fact, right through his book he never informs the reader where the balls are likely to stop after any stroke. John Roberts, sen., who saw Kentfield at his best, was of opinion that he "played a very artistic game, but possessed very little power of cue. He

depended on slow twists and fancy screws, and rarely attempted a brilliant forcing hazard. He gave misses, and made baulks whenever they were practicable, and never departed from the strict game." It savours strongly of presumption to criticize the verdict of such an eye-witness, but the fact remains that we have before us a diagram of Kentfield's in which the object ball is shown slightly above the middle pockets and rather to the left of the longitudinal centre of the table. The cue ball is just behind the baulk line and almost straight behind the object. The stroke advocated is a double baulk made by screwing back off the object ball and sending it twice up and down the table before it comes to rest in baulk. Surely this is no stroke for a man "with very little cue power," even when full allowance is made for a rougher cloth than we use at present helping the screw effect to the full. There must have been a limit to this helpful tendency, as if the cloth was too

heavy it would have been impossible to force the object ball the required distance. Most probably the truth is that the elder Roberts estimated Kentfield's cue power by comparing it with his own, which was phenomenal ; but in a general sense it is difficult indeed to credit a player with "very little cue power" who calmly tells his pupils to play at a ball some three feet six inches away with the idea of screwing almost straight back into baulk. Lack of ball control rather than cue power seems to have been Kentfield's weakness, and judged by modern standards he would be reckoned a useful stroke player with little idea of making a break and rather hazy notions concerning the proper application of side in conjunction with screw.

The reign of Kentfield ended in 1849, when the elder Roberts claimed the championship because Kentfield refused to play him for it. A contemporaneous authority in *Bell's Life* states : "Kentfield showed good judgment in declining

a match with Roberts, for, had they played upon a neutral table, he would have been defeated to a certainty." As a player the elder Roberts certainly stood in a class by himself in his day and generation, and gave to the game a touch of the picturesque which only a great personality could bestow. His cue power was marvellous, and it is not altogether pleasing that records of it dwell so persistently on his ability to knock two balls off the table at will. A more serious and scientific account of the cue power of the elder Roberts would be a decided acquisition to billiard history. All we know for certain is that his cue power was full of daring brilliance which revelled in scoring no matter how the balls might be placed. How supremely great the elder Roberts was in this respect may be judged from the fact that the present John Roberts has told the writer more than once that "I have never seen any other player with the cue power my father had," a remark which only increases our regret that satisfactory details are not

in evidence. The exhibition of such supreme cue power spread over a long period must have had a tremendous influence on the game, and although we cannot select any particular stroke or scoring sequence and say, "This was derived from the billiards of the elder Roberts," yet it is but just to infer that if such a thing was possible, enough would be revealed to show what a creative artist this fine old sportsman really was. His largest break totalled 346, and contained 104 consecutive spot hazards; for years he could give 300 in 1000 for *real* money to any other player; and he held the championship by undisputed right until 1870. He was then forty-four years of age, when William Cook, sen., then a young man of twenty-one, defeated him in the most memorable match for the championship ever played. The game was 1200 up, and Cook ran out a winner by 117 points. It is curious to note that this was only the second time the championship of billiards had been won and lost in

open contest, although the title had existed for between forty and fifty years. After this John Roberts the elder played now and then in public, but never did himself justice, and at this stage it is best to leave his life and achievements with the remark that as regards dash and enterprise he was a billiard pioneer, and that in an all-round sense his educative influence on the game must have been far greater than we can ever hope to prove.

William Cook, sen., came to the front with a bound after his victory over the elder Roberts. He had a charming personality and was an exquisitely beautiful player. His influence on the game was all in the direction of refining it by exploiting the subtle touches of the born artist. He was the father of close cannon play in English billiards, and in this delicate phase of the game he was easily first among his contemporaries. Judgment and touch, especially when the balls were close together, was the dominant note of the billiards of the elder Cook ; and

we owe to his genius that development which gave the game an elusive charm peculiarly its own ; a charm which in the hands of a master shows that the balls can be compelled to yield many points with so little apparent effort that the glistening ivories seem almost to nestle together and score of their own accord. Cook was not destined to hold the championship for long without having to defend his title. Only two months and three days passed before John Roberts, jun., avenged his father's defeat by beating Cook in a championship match of a thousand-up, winning by the decisive margin of 478 points. This introduces the present John Roberts, at the time of writing an honoured veteran in our midst, and a man whose influence on the game of billiards has been so great that for many years one might truly say that John Roberts was billiards.

He found the game outlined by Carr and Kentfield animated and invigorated by his own father, and polished with a deft and delicate touch by his contem-

porary, William Cook. It was left to him to weld into his own game everything that was best of billiards as he found it, and then to improve it by the continual application of his own genius as a creative artist. Here John Roberts is the supreme master. Great as he was as a player, he must be reckoned greater still as the creator of scoring methods now general. The top-of-the-table game was his crowning achievement in this respect. He invented it long before the spot stroke was barred officially, and thus gave professional exponents a lucrative scoring ground at the spot end of the table which they retain to this day. But this example is only the most obvious of his creations. His marvellous gathering strokes, wonderful screw shots, and magical command of the balls which seemed to compel them to yield both points and position at his will—all these were his own—he made them. He worked hard to make them, too, for in spite of an unequalled style and execution

full of that art which conceals art, those privileged to know are well aware of the creditable truth that the masterly cueman-ship of John Roberts was indeed an inborn gift perfected by an infinite capacity for taking pains. He brought to bear on his billiards the whole concentrated energy of a masterful and resolute personality, and lavished on the game intellectual powers which would have given him success in any walk of life. Above all, he always strove to raise the game in the public estimation, to get it away from degrading influences, and place it in the position it deserves to hold as a national pastime and an exhibition of clean and clever sport. As a billiard showman it was always a case of John Roberts first and the rest nowhere; and, without wishing to say anything unkind, it is worth while remarking that billiards would be the better if the example of John Roberts in this connexion had been imitated as successfully as his scoring methods have been.

When writing about the development of billiard playing J. Bennett must not be overlooked, as he shared with Cook the honour of beating the present John Roberts for the championship. He must be placed in billiard history as the greatest master of safety play known to the game in his day and generation, and it is doubtful whether his equal in this respect has ever been seen since he stepped out of the arena. How clever he was at closing up the game may be judged from the fact that in his first championship match against John Roberts, which he won by 95 points, the score was 215 against 172 in his favour after play had lasted for rather more than an hour. This was abnormally slow, even on the old three-inch-pocket table, and it proves most conclusively that what J. Bennett did not know about safety play was not worth knowing. This phase of billiards, like stonewalling at cricket, has its uses at times, but is never popular either as a spectacle or as the most approved

method of deciding a match. Fundamentally as a match-winning force it is as unsound as the passive defensive in war, and is so difficult in execution that it must be handled by a very great cueman indeed (endowed with iron nerve and the temperament of an iceberg) before it can be exploited consistently and made to pay as a settled policy.

One other development of billiards has to be dealt with before our survey is anything like complete. We refer to the inordinate proficiency displayed by a few professional exponents in one particular stroke or series of strokes. The spot stroke comes first under this heading, and without digressing into the history of its origin and growth, we can pass on to that period when W. J. Peall was so great a master of the stroke that he made a break of over three thousand against Charles Dawson, to say nothing of breaks of a thousand or so in such profusion that he seemed to make them as often as he wished. Now, to give credit where credit

is due, there is no denying the plain truth that the spot stroke is not easy, and that the proficiency exhibited by Peall was an extraordinary accomplishment—a wonderful display of fair, honest billiards brought to such perfection that none could stand against it. But to say that it lacked variety is perhaps a charitable criticism, and to save the game as a spectacle it became necessary to introduce the familiar “spot-barred” rules. The next stroke to come under the official ban was the notorious “anchor cannon” introduced by Lovejoy, and killed by several players (including one of the authors of this book), demonstrating in actual play that when once the balls were “anchored” nothing but old age creeping over the cueman need end the break. More billiard legislation directed against particular strokes is threatened, so some people think, by George Gray’s marvellous red-ball play. Up to the present, however, the young Australian, wonderful as his hazard striking is, has not shown such form

with ivory balls that his game need be interfered with, and there are many excellent reasons for assuming that the necessity will never arise. The point is that composition balls, good as they are in many respects, have yet to win recognition as an accepted and standardized means of determining excellence at billiard playing. The fact that they may be better than ivory is beside the point. The truth is that the ivory ball, whatever its imperfections may be, has been used in our championships both amateur and professional ever since these contests were instituted. This circumstance makes the ivory ball the standard article, the one and only ball with which the highest honours of the game can be won; and while this is true it is surely premature to conclude that proficiency with another type of ball calls for legislation.

It appears highly probable that the inherent imperfections of the ivory ball will in time transform George Gray into a three-ball player with the red losing

hazard as the backbone of his game. Kentfield told us years ago that, "as the billiard ball is made of ivory, there must always be some one part of the mass more dense than another; and, consequently, the most skilfully turned ball will have a bias in a greater or less degree." Add to this the fact that no two sets of ivory balls are exactly alike, and that they are liable to constant variation on account of atmospheric and climatic changes, and it will be seen that as regards implements the scientific precision George Gray must have to make thousand breaks off the red ball with anything approaching frequency simply does not exist when he has to play with the ivories. And without the least desire to belittle his truly wonderful skill in controlling the red ball, it is to be hoped that the ivories will always prove refractory enough to stop him or any other player from bringing the losing hazard under a bar of any description. The stroke is the backbone of billiards, especially for amateurs, and

by exploiting it so splendidly the young Australian has done the game more good than any other player of modern times. The man in the street can follow the theory of the "all red route" easily enough, and by practising the red-ball game finds that his scoring powers are improved to a gratifying extent. This adds to his interest in billiards, and it will be an absolute calamity if this stroke is limited. Incidentally, it should be noted that the task of those who essay to limit a sequence of losing hazards off the red ball is one of enormous difficulty. Obviously, a reasonable number of hazards would have to be allowed, and if this is granted it would not be so very hard for great cuemen like George Gray to arrange for a set cannon position which would bring the red ball into play over and over again after the one cannon necessary to break the sequence had been scored. It is to be hoped that nothing of the sort will ever be seen, as it will be a bad day for billiards if the two-ball game ever compels action against the red losing hazard.

The influence of foreign billiards on the English game might well form a chapter by itself, especially if the effect of the masse stroke was dealt with at all comprehensively. All we know about this stroke has been imported, and even to-day Continental or American players must be seen to understand what can be done with the masse stroke in the hands of an expert. As regards billiard skill in general—that mastery of the balls which stamps the great player on either our own or the pocketless table—it has often been stated that if the foreigners had learned our game the best of them would have defeated our leading players. This assertion has been made by some extremely good judges, but the only evidence we have on the point was provided by the famous series of matches between John Roberts and Frank Ives, the American champion. The first game was played on a table with three-and-a-quarter-inch pockets and with balls two and a quarter inches in diameter, and under these conditions Ives had

matters all his own way, making a break of 2243 and winning by the difference between 6000 and 3821. The second match, played in Chicago, saw a line placed across each of the corner pockets, inside which only two cannons could be scored. But this did not stop Ives, as he won by 757 in a game 6000 up. This restriction was retained for the third match, one of 10,000 up, and the pockets were enlarged to three and five-eighths inches—Roberts won by 1262 points. These games undoubtedly brought the cannon to greater perfection in English billiards, and so far they were in every respect commendable. But as a comparison of the cuemanship of the two players they taught us next to nothing; the conditions were too artificial to make the test convincing. It is a great pity that such an interesting point has to be left in such an unsatisfactory state, and it will be a wonderful thing for billiards if some genius succeeds in making one type of the game universal the wide world over.

Perhaps those sporting cosmopolitans who have made our sports theirs to an extent which sets the croakers writing of our national decadence will turn to English billiards one of these days, if only to show us that we are not to be left with unchallenged supremacy at any game under the sun.

CHAPTER III

THE LITERATURE AND ATMOSPHERE OF BILLIARDS

BILLIARDS has no particular reason to be grateful to the makers of our literature. The Shakespearean reference is quite in keeping with the real spirit of the game, and very nearly in a class by itself in this respect. Almost every other author seems to drag in billiards when he wishes to dwell upon some aspect of human weakness or depravity. Even the cultured I. d'Israeli, toying with the curiosities of literature, can only say of billiards that "M. de Chamillart, Minister of France, owed his promotion merely to his being the only man who could beat Louis XIV at billiards. He retired with a pension, after ruining the finances of his country." Johnson, wishing to show how far self-delusion can inflate its victims with a

resentful sense of their infallibility, says: "Fortunio, when he was privy counsellor, procured a clerk to be dismissed from one of the publick offices, in which he was eminent for his skill and assiduity, because he had been heard to say that there was another man in the kingdom on whose skill at billiards he would lay his money against Fortunio's." Smollett in "Peregrine Pickle" makes a billiard-room in Bath the scene of a discreditable gambling adventure of the "diamond cut diamond" description, and "The Marker," by the late James Payn, shows a skilful pen, painting in sombre tints the life of a man who is "the dumb witness, daily, of innumerable frauds." Writers on billiards from White to Crawley, and some of a later period, deemed it part of their duty to revel in exposing the shady tricks of undesirables who specialized in fleecing unsophisticated billiard players. Those who write little things about great men also scored at the expense of billiards, hence the oft-quoted remark of the "dis-

tinguished scientist" who, sadly beaten at billiards, is reputed to have told his opponent that "Reasonable skill at billiards is proof of a proper appreciation of the good things of life, but such proficiency as yours is evidence of nothing but a misspent youth." Even comic opera could do nothing better for billiards than gibe at

*The billiard sharp whom anyone
catches, his lot's extremely hard.
He's doomed to dwell in a prison cell,
on a spot that's always barred.*

If such an accumulation of written evidence may be taken as indicative of what people said and thought about the game, and we know of nothing material which can be put forward against this supposition, it is quite easy to understand that billiards must have been enveloped in an unhealthy moral atmosphere. It is wrong to ignore this unsavoury episode in the life of billiards past and gone—the right thing to do is to regard it as merely a

transitory phase in the history of the game. Billiards, like cricket, is reminiscent of what we moderns consider to be the faults and failings of generations of sportsmen who are no more. There was a time when cricket matches between gentlemen were played for very large sums of money, and bets galore were made on contests which were not altogether free from sharp and shady practices. But now cricket is such pure sport that in any walk of life we call a thing "not cricket" which deviates in the slightest from that code, mostly unwritten, which defines the straight thing between man and man. Billiards, too, has undergone a similar change, and the game has suffered a great wrong because this fact is not anything like so well known as it should be. Yet it is perfectly true. Years ago, and not so many years either, if a man wanted to play a game of billiards without having "something on," he would have been regarded as anything but a sportsman. Now, however, if a man wished to play for money his desire

would stamp him as a curious sort of chap whose ideas on sport were mouldy and antiquated—that is, if he was known to the man he wished to play against. If he was not known, and offered to bet on the game, he would be looked upon in any ordinary billiard-room as first cousin to the three-card-trick merchant and a blood relation of those noble sportsmen whose ideas on confidence land them in prison when they are caught. The fact is that billiards and gambling have parted company; but to be candid on the point we must accept that definition of gambling advanced by the worthy divine who said that “To call whist for threepenny points ‘gambling’ is stretching the thread of morality to breaking-point.” So, to play billiards for the table money plus the cost of refreshments and, maybe, between friends, a small stake, is not reckoned as gambling within our present definition of the word. Yet it is an absolute fact that even such “gambling” as this is decidedly the exception. Many fine billiard players

insist upon sharing the cost of the table, and are quite content with the honour and glory of winning. This practice is becoming more popular every day owing to the growing custom of charging by the hour for tables, and is in every way commendable.

We may take it for granted that the atmosphere of present-day billiards is clean and wholesome, and that whatever may have been the case during the past, the spirit of modern billiards is above those mean and shifty practices inseparable from the billiard sharp. Proprietors of billiard-rooms put the "bar up" against these gentry years ago, and did it so effectively that a real billiard sharp of the old type, haunting billiard-rooms to catch flats, would want more than a little finding in all London to-day. This change came about when universal gambling began to go out of fashion, and it became obvious that if billiard-rooms were to pay they must attract by reason of the intrinsic merits of the game. Then self-interest

compelled billiard-room managers and proprietors to eliminate the sharper, and in several instances they have gone even further by "requesting the absence" of men who were quite straight, but had a weakness for playing for useful sums of money. "This sort," as the proprietor of a first-class billiard-room remarked to the writer, "frighten people away from my tables. They always play at least a fairly good game, and generally stick to it for hours on end. Then the chap they have taken on may easily find himself let in for best part of a sovereign for sundry drinks and the table money, and by the time the bets are reckoned up he may have precious little change out of a fiver. This is not ruin, of course, but it's too expensive for a mere game, and the loser feels that he has not had value for money. So he gives billiards a miss, and I see him no more. If his fun had cost him half the table money, or even all of it, I should have seen him next day more likely than not, and the odds are that he would become a

regular customer of mine. No, I do not want the betting man, he's no use to my room, not even when he's straight, and if he's a crook he goes out as soon as I spot him, even if I have to stop him in the middle of a game. But the crooks have gone out of the billiard business now. They tell me that the last one took to work in despair only the other day."

CHAPTER IV

INSTRUCTIONAL

BEFORE entering upon the purely instructional portion of this volume, it is as well to consider in a general way the main attributes of skill in billiard playing. Undoubtedly, the greatest players are both born and made, but we have excellent authority for stating that they are more made than born. Plenty of amateurs have natural aptitude enough to become really great cuemen, but lack either the facility or desire to undergo the tremendous amount of practice, concentrated and continuous practice, they must undertake if they are to hold their own against all comers in first-class billiards. No matter how much billiards he might have born in him, it is safe to assert that no man could compete on even

terms against the best professionals unless he was prepared to devote years of his life to practice, practice so constant and monotonous that only professional ambition has so far been able to carry a man through it. This is the sole reason why there is such a gulf fixed between the playing ability of amateurs and professionals. Practice alone can give that almost supernatural continuity of accuracy which is the beginning and end of world supremacy in billiards. Amateurs who play good billiards know how true this is. They know that practice on the right lines has improved their game by progressive stages to the occasional making of a hundred break in rare instances, and to the making of forty or fifty breaks in plenty of instances; and they are well aware of how much more practice is necessary if they wish to improve still further. This class, however, is but a small one compared with the army of players who reach a certain stage of proficiency and then stop, who never seem to

improve their game no matter how often they play. These are the players who have picked up billiards in their own way, and who persist in playing what they think to be the game until their natural faults are stereotyped, and there is no hope for them unless they will begin afresh by forgetting all they have learned for themselves. Such players, as well as absolute beginners, can learn much from a reliable book on billiards; but we have no intention of attempting to disguise the fact that the man who makes breaks of fifty or over with a fair amount of frequency has nothing much to learn about billiards which can be put into print. Practice is almost his only tutor, unless he is aiming very high indeed, when he will doubtless have to seek expert advice concerning some of the more intricate points of the game.

The ordinary player whose game is obviously in need of improvement, or the absolute beginner who has everything to learn, really ought to commence by understanding something about the forces

which operate on a billiard ball in motion. Scientists have dwelt on this phase of billiards in more learned pages than the average man can understand, but for practical purposes we may say that the forces acting upon a billiard ball in motion are the propulsive power of the cue and the friction between the moving ball and the cloth, added to effects produced by ball-to-ball contact, or contact between a moving ball and a cushion. This is a crude and elementary definition, and woefully inaccurate and incomplete from the view-point of the scientific theorist ; but it constitutes a convenient means of outlining certain billiard fundamentals which must be grasped by those who wish to play well. The propulsive power of the cue covers everything which happens when the cue ball is struck, and a proper understanding of the nature of this power and its correct application is the foundation of good billiards. The vital point under this heading is that every stroke with the cue is a swing, never a poke or a push.

The tip of the cue is brought to bear upon a sphere capable of both forward and rotary movement, and unless the stroke is a true swing it is impossible to impart that amount of rotary movement in any required direction essential to success, although it may be possible enough to impart even a surprising amount of forward movement to the ball by means of a poke pure and simple. For instance, watch a first-class player attempting a cannon off several cushions. He does not appear to strike the ball very hard, yet it darts from cushion to cushion like a thing of life, and the cue ball reaches its objective with supreme ease. This is because the professor swings his cue so beautifully, because he allows the cue to do its work with such delightful freedom. The untaught beginner, and some who are not beginners, would smash at such a stroke with a stiff, constrained cue action which has no vitality in it, and then wonder at the amount of effort they have wasted when they behold the ball

run hard and dead very far indeed from its intended destination. Most probably, such players are full of that original billiard sin which compels them to grasp the butt of the cue when making a stroke, and to clutch the butt the harder when they wish to put power into their attempt to score. This is a sad mistake. The cue must be held without effort in a loop formed by the fingers and thumb of the right hand. Some very fine players, including George Gray, only use the first finger and the thumb when holding the cue. Charles Dawson believed in using two fingers and the thumb, and there does not seem to be anything so very wrong in bringing a third finger to bear on the cue-butt if a player finds it helpful to do so. The one thing that matters is that the cue is poised rather than held. The ideal aimed at is such a light, delicate hold that when a stroke is made it feels almost as if the cue is thrown at the ball and is suspended in space at the moment of contact between ball and cue.

The various methods of holding the cue, all designed to the same end, lightness, bring us to a most important point connected with the primary essentials of billiards. This is, that to obtain a desired effect a good deal of latitude must be allowed to individual requirements. More nonsense than enough has been written with a view of laying down hard-and-fast rules regarding what may be called the mechanics of billiard playing. We know that to play billiards properly a man must train himself to produce certain effects with machine-like precision, but it by no means follows that to do this every man must be forced into the same mould. Besides, the thing cannot be done. The table is the same no matter what the physique of a player may be, so are the balls, and cues alone vary to suit the individual. Therefore, we have to lay down general principles and vary their application to suit men of all makes and shapes. So far, we have dealt with the method of holding the cue, and the reader

may pick from our hints the method he prefers, always provided he does not infringe the inexorable rule which enjoins lightness and delicacy. Three to four inches from the butt end of the cue is the correct place for the right hand, and when once a player fixes a point which suits him he should not vary it. The general idea seems to be that the farther back the right hand is placed the greater the gain in power. Such increase of power, even if gained at all, is obtained at the grave risk of inaccurate cue delivery, a risk which becomes a certainty if the hand is brought completely to the butt-end, and the beginner would be well advised to go farther in the other direction than his natural inclination would take him ; for it is a curious fact that the vast majority of billiard tyros will insist upon grasping the cue much too near the butt.

In our preceding paragraph we stated that "cues alone vary to suit the individual," and we may say at once that the player who neglects to take advantage of this

circumstance by obtaining a private cue of his own is inflicting a most unfair handicap upon himself. From 15 to 16 oz. may seem a narrow range, but it embraces the weights favoured by some of the finest players in the world; and unless a man feels that to give him confidence he really must have something heavier, he need never handle a cue weighing more than exactly one pound. But he ought to have a good one, a well-balanced article made of the best material and by competent craftsmen. He must expect to pay a fair price for a cue of this type, as "cheap and nasty" is indeed profoundly true not only as regards cues, but also everything else connected with the billiard-table and its accessories.

The left hand forms the bridge over which the cue slides when a stroke is made. Our illustrations show a typical bridge, and also how the bridge is adapted to meet with various contingencies. To make the bridge the left arm should be thrown out without constraint, and the

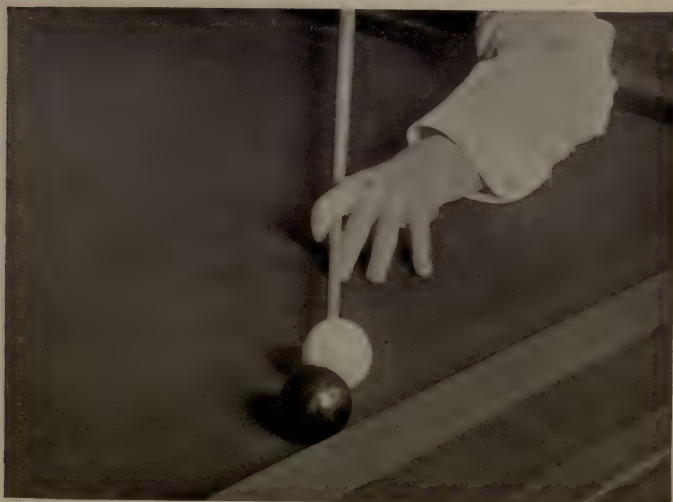


TOM REECE MAKING A TYPICAL BRIDGE
A "MASSE" BRIDGE BY TOM REECE



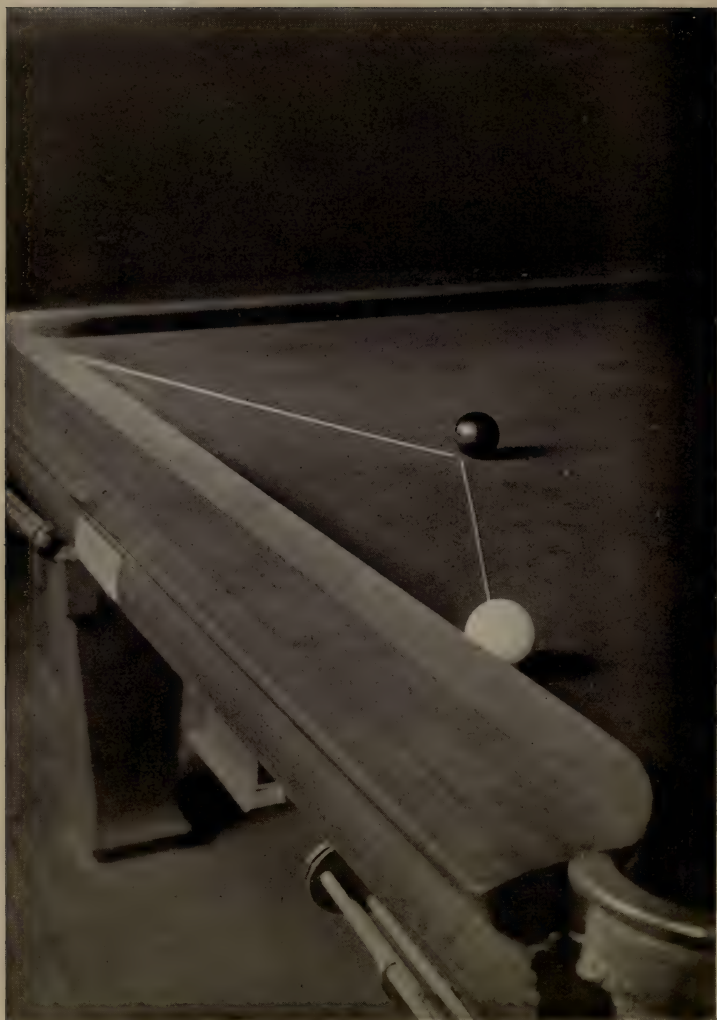
"THE BRIDGE"

How it is made and adapted to meet with various contingencies



"THE BRIDGE"

How it is made and adapted to meet with various contingencies



A FORCING LOSER OFF THE SPOTTED RED

hand laid flat on the cloth. Keep the finger-tips firm and arch the hand gradually until the desired poise is gained. Then bring the thumb against the side of the forefinger, and the bridge is made. Common faults in bridge-making are to spread the fingers too much, or to leave the thumb projecting clear of the forefinger. How fatal these faults are may be judged from the fact that a bridge must be firm and reliable, or it is certain to spoil any attempt to make a player. The bridge is really a fulcrum over which a constantly moving lever is operating, and it simply must remain immovable or any stroke becomes an utterly unknown quantity.

We now pass to body pose and the position of the legs and feet. These points are usually dealt with before the hands are mentioned, but we have purposely kept them back to emphasize our opinion that far too much hard-and-fast dogma has been expounded on these matters. *The correct attitude for billiard playing*

is both firm and comfortable, and varies so largely in individuals that it is impossible to define more than general characteristics. The left leg should be thrown slightly forward, and the body inclined easily and gracefully until the bridge can be made without straining in the least. And, in spite of George Gray playing so well with both knees bent, it is an article of faith among the vast majority of first-class players that the right knee should never be bent, and that the less the left knee is bent the better. The essential thing connected with leg position and body pose is to gain the end aimed at, which is to ensure that the player faces the cue ball in such a way that when his stroke is played his cue moves in a line directly under the point of his chin, and moves freely without the least deviation to the right or left. This result is the test—it cannot be attained if the body pose is wrong, or if the legs are incorrectly placed—and if it is attained almost any departure from orthodox models is justifi-

able, although it must be noted that not 1 per cent. of players will discover that what is good enough for the best is not quite what they want.

Up to the present we have dealt with the passive side of billiard playing, and it is necessary to remark how very passive it really is. The cue must be held without the least tendency to even quiver, the bridge must be firm and still, and the feet, legs, and body so placed and posed that the player is steadiness personified when he shapes for his stroke. The importance of this absolute absence of movement cannot be too strongly insisted upon, as it means as much to the cueman as it does to the rifleman. Now we come to the motive power which transforms the passive cueman ready for the stroke into a man of action. This power comes almost entirely from the elbow downwards of the cue arm; the upper arm is very little used, and the shoulder never, unless an exceptional forcing stroke has to be played. The cue arm must be kept as close to the

side as possible, with the right elbow directly above the hand holding the cue ; any tendency to turn the elbow outwards must be guarded against with particular care, as it is a natural and common fault. When striking the ball the cue must be drawn back, farther back than usual for a forcing stroke, and then swung at the ball. This swing is cuemanship, and in every great player is as free from lateral movement as the glide of a piston-rod. There is no exception to this rule. No matter what pose a master may adopt, its culminating point is to give him that accuracy of cue delivery which makes him the player he is, and it follows that this ideal must be accepted and striven after by all who wish to excel at the game. Yet how many neglect it, know nothing about it, in fact. Men who appreciate at a glance what a straight bat means in cricket, or what the proper swing means at golf, seem to think that any action which brings cue and ball together will do for billiards. This is utterly wrong. A

perfect cue delivery is really one of the most delightful things in the world of sport, and yet it is so often ignored. Men wonder what side or screw a great player employs to produce certain effects, and are amazed at his marvellous control of the balls; and yet so few of them even imagine that the mainspring of it all is that beautiful play of the cue arm, so lithe and lissom and yet so true, which impels the cue backwards and forwards with mechanical accuracy so obedient to the will of the professor that it makes him for the time being an absolute autocrat of the billiard-table.

The pupil must concentrate his mind on cue delivery until the correct thing becomes second nature to him. He must face the balls steadily, make the cue swing beneath the point of his chin, and swing true from beginning to end of the stroke. There must be no side movement whatever, nor any up-and-down movement of the pump-handle variety. Just one swing which carries the cue to

the desired point on the object ball and beyond it in the freedom of the stroke—that is the ideal, although it does not matter if the final swing is preceded by one or two preliminary swings to gauge the impetus for the stroke. The habit is seen in the best of players, and is no fault unless overdone, when it becomes a nuisance to spectators and has a marked tendency to make the player lose confidence. One point connected with accurate cuemanship must not be overlooked—that is, the distance between the bridge hand and the ball at the moment of cue contact. About twelve inches is the space the best players allow the cue to project beyond the left hand, but beginners would be well advised to commence with rather less than this, and increase the distance as they gain confidence. In any case, it is better to play with too little rather than too much cue over the left hand, as although playing “with a long bridge” may give a certain amount of increased cue power which comes in useful at times,

it tends to destroy that accuracy which is always required, and is therefore to be avoided. We have now dealt with everything behind that propulsive power of the cue which is one of the forces acting upon a billiard ball in motion, and we may sum the matter up by saying that its effectiveness depends on freedom and accuracy; that any tendency to sway the body, move the bridge hand, shift the feet or legs, raise the cue-butt too high, or sway the cue from side to side, spoils a stroke; and that a real stroke cannot be made at all unless the cue is delivered with a swing free and unchecked from first to last, and as true as the hand and eye of the player can make it. Practice, hard practice, should be lavished on these preliminaries which are so often slurred over, and no cueman should rest content until he has learned how to stand and deliver his cue as befits a billiard player worthy of the name. Once this knowledge is gained, the path to proficiency in billiards is open; but until it is gained there can be

no hope of real improvement. Therefore, the young player should study and practise these things cue in hand with no ball on the table. He should practise accuracy of cue delivery by playing with freedom straight over the baulk line at an imaginary ball, and if he can induce a candid friend to watch for wobbling or unsteadiness he will find a real helper. It is an excellent idea to study the pose and cue delivery of a famous player of about the same build as a man anxious to improve. Half an hour spent in this way, even if it means missing all sight of the balls to note foot and leg position, elbow play, method of holding cue, the making of a bridge, and above all cue swing and delivery, will be about the most profitable thirty minutes the billiard aspirant could wish to have. But he must resolve to incorporate what he has learned into his own game, adapted, of course, to his own individuality. And to do this means practice so distasteful that it is allied to drudgery—private practice, too. A man cannot expect to learn anything

about cuemanship if he attempts to eradicate faults, or instil good style before faults have time to grow, while playing a hundred-up with a friend. The ardour of the game precludes all possibility of improvement in the desired direction. Faults may be faults, but there seems to be a chance of scoring in spite of them. The shot is played without further thought, a score results, and after that all ideas concerning correct cuemanship are cast to the winds until the game is won or lost. No, this will not do at all. The man who wishes to learn billiards must start by himself and play no games against opponents until he has mastered rudimentary essentials by private practice. This is true in principle regarding every stage of billiard development. A very great deal of private practice is essential if first-class form is to be maintained, or we may be sure that all the leading professionals would not have billiard-tables in their homes. The amateur who has reached a certain degree of proficiency

need not practise hard by himself unless he is flying at the highest game in the world of amateur billiards; but the man who has practically everything to learn must have private practice and plenty of it or he will need to be exceptionally gifted if he meets with more than a limited measure of success.

CHAPTER V

STROKES AND BREAKS

IT is impossible to overestimate the importance of accuracy and swing in cue delivery. These things are the secret of cue power and everything which cue power means. It is no use trying to do anything with a billiard ball until the correct method of handling the cue is mastered, and by handling the cue we mean everything which takes place before the cue-tip comes into contact with the ivory. This is the point so many beginners fail to appreciate, and even at the risk of appearing to labour it unduly we must impress upon the pupil that unless he cultivates a firm and natural stance at the table and a true and free cue delivery he cannot hope to excel. Sometimes, not often, perfect cue delivery and the

resultant cue power are a natural gift. Players thus gifted have done extraordinary things on a billiard-table. One of them, a 'Varsity student, could play from the "D" and screw the cue ball back into baulk off the spotted red. Straight back, that is, or so nearly straight that the cue ball did not touch an intervening cushion. So far as we are aware, this marvellous stroke has never been accomplished by any other player, from which it appears that so far as sheer cue power goes the record is held by an amateur who, however, failed to achieve distinction enough at the game to place his name before the public. He remains unknown, although there can be no question regarding the authenticity of his feat.

Players of the same type, although of less pronounced ability, are met with at intervals, and their game is full of spectacular surprises. They seem to be able to make almost any stroke which is difficult, even abnormally difficult, but their

weak point is that they miss many simple shots and treat ball control as something they need not bother about. Such players are worth noting; their game shows that cue power alone, indispensable as it is, cannot by itself make a billiard player. It must be accompanied by accuracy and positional control of the balls or it will merely produce a showy cueman who is sure to be beaten by the sound player. Brilliancy in billiards is delightful, and often necessary to force an opening when the balls are badly placed, but it is not the main point to be studied. The man who wins at billiards seldom or never misses a simple stroke—the whole of the stroke we mean, both the score and the after position. Every stroke at billiards is divided into two portions, the actual score and the position of the balls after the score is made. It sometimes happens that the balls are placed so badly that the energies of even the best players have to be thrown altogether into

the stroke and nothing but the stroke. When this happens the subsequent run of the balls is often, but not always, a matter of luck; but it does not occur nearly so often as might be inferred from the game of too many amateurs. Time after time players of this description go for the stroke and nothing else when a correct positional sequence alone can be called billiards, or anything like it, and by an extraordinary exhibition of misapplied ingenuity such players will often take considerable pains to make a stroke more difficult than it need be, as if on purpose to play it so badly that the balls are sure to run safe. Of course, they do not mean to court such difficulties; the fact is that they struggle along in absolute ignorance of the points to be observed in billiard playing, as distinct from stroke making, and the consequence is that they work very hard indeed for but few points.

As our remarks upon the phase of the

game mentioned in the preceding paragraph will be continually enlarged upon as the book progresses, we will leave for awhile that cuemanship which gives propulsive power to the cue and thus creates one of the forces acting upon a billiard ball in motion, and turn to the question of friction between the cloth and the ball. Naturally, this is greater when the ball first begins to move, and its effect is most pronounced when a ball loaded with "drag" slides over the cloth before rotation commences. But the retarding influence of friction is ever present while a billiard ball is moving, and its practical effect is of the utmost importance. Friction between ball and cloth gives that "grip" which, especially in the case of a side-laden ball, can be depended upon to produce known results of real worth to the player. The most obvious of these is that reversal of the action of side when playing against the nap which must always be kept in mind. This means that a slowly moving ball

carrying plenty of right-hand side will drift steadily to the left when the ball is moving down the table against the nap of the cloth, and, of course, an opposite effect is produced by the employment of left-hand side. The effect is most pronounced when playing directly against the nap straight down the table towards baulk, but it is ever present, and is by no means negligible when playing strokes which send the cue ball obliquely against the nap. It is, however, eliminated by speed, as the effect of side on the course of a swiftly moving ball is the same whether a stroke is played with or against the nap. But slow to medium strokes carrying a maximum of side against the nap must always be handled with due regard to the peculiar action of side under the circumstances. When playing with the nap, side causes a ball to deviate considerably from its normal course, such deviation invariably taking the direction of the side imparted, and it is very necessary to note

that whether playing with or against the nap, the influence of side on the course of the cue ball is appreciable and important, both before and after contact with an object ball or a cushion. Many beautiful strokes depend for their effect on the swerve of the cue ball before contact with an object ball, a development seen at its zenith in masse strokes ; but nevertheless sufficiently in evidence on other occasions to make the deviation of the cue ball before contact a matter for careful consideration whenever strong side is employed. The fact is that pronounced side is almost invariably accompanied by a certain amount of masse effect due to a slightly downward cue delivery. In actual play the cue is seldom perfectly horizontal when the cue ball is struck—the swing of the cue carried through the ball often brings the tip to the cloth or very near it, unless a free stroke of the forcing variety is played and the cue allowed to run through until an

upward swing at the end of the stroke is developed.

The result of this downward swing is to pinch the cue ball for an infinitesimal fraction of time between the cue-tip and the cloth, and thus set up a deviation from a straight line whenever side is employed to a marked degree. This deviation increases more and more as the elevation of the cue-butt approaches the limit required to produce masse effects, but the point the beginner has to note is that the deviation can be very considerable without any inordinate raising of the cue-butt. To prove this, place the red ball on the billiard spot and the cue ball almost touching the top cushion ten inches from the left corner pocket. This destroys all chance of making the ordinary half-ball losing hazard into the opposite top pocket, and the correct stroke is made by raising the cue-butt at least six inches more than usual, and with a nice dropping swing imparting as much left side to the cue

ball as possible. Aim must be taken to either hit the red ball in the middle or on the side farthest from the top cushion—the amount of divergence varies with individual cue power—and the result is that the pronounced downward cue action in conjunction with the strong side causes the cue ball to swerve before ball-to-ball contact to such an extent that the red is struck rather less than half-ball on its left side, and the hazard is made gently enough to steer the object ball into perfect position over the middle pocket. Greater strength than this spoils the stroke, which, if played at proper strength, is slow enough to make the swerve of the cue ball before contact plain to the eye. The stroke is a most useful one in its proper place, but the all-round lesson it conveys to the beginner is far more useful. It shows that even when the cue is perfectly horizontal at the instant of cue and ball contact, a most unusual occurrence, a side-laden cue ball must swerve before reaching its objective,

such swerve varying according to the amount of side imparted and the extent to which the butt is raised, and also to a degree by reason of the inherent cue power of individual players. Fortunately, however, this preliminary swerve of the side-laden cue ball is often neutralized by the margin of permissible error in billiards, and a score is made in spite of it. When this cannot happen, expert players vary the point of aim to allow for the preliminary drift of the cue ball. They may even aim to miss the ball altogether, knowing full well that side as they have applied it will compel the cue ball to swerve during its run and bring about the desired contact when it reaches the object ball.

Long before a player can hope to acquire enough proficiency to exploit the side effects mentioned above, he must know that they exist, as he cannot otherwise understand how disastrous they are unless under perfect control. Plain-ball striking must be thoroughly practised

and understood before that "bit of side" so beloved of the beginner is even so much as mentioned except as a warning. Billiard education is really as progressive as learning to read. Its alphabet is correct attitude, a proper bridge, a right holding of the cue, and a smooth, free, accurate cue delivery. Plain-ball strokes may fairly be likened to the simple, forceful words which form the main fabric of our language; and all other strokes may safely be written down as the billiard equivalents of words used with great effect by masters of our tongue. Possibly—we are not quite sure about it—the simile may be pushed far enough to compare flukes with swear words. At any rate, the whole illustration will serve to show how necessary it is that proficiency in billiard playing should progress by regular and methodical stages, and that the man who wishes to make big strokes before he has so much as a working knowledge of rudimentary fundamentals is like the over-ambitious schoolboy who dots his

composition with long words without due regard to their proper place and meaning, or even the detail of spelling them correctly. To master the billiard alphabet the tyro should practice cue in hand those elements of cuemanship which bear on the game before the ball is actually struck. He should study stance, consider his bridge, and practise cue delivery with no ball on the table, and with some of that enthusiasm which induced correct cricketers of the old school to "play a straight bat" over and over again before a mirror.

When the novice feels that he has some idea of the proper method of holding and using a billiard cue, he should turn his attention to one-ball practice, striving all the time to correct any errors he may discover in his cuemanship. Truth is the constant test by which he may continually correct himself. If he finds he is not striking the ball truly after his one-ball practice has fairly commenced, he may be sure that his cue delivery is faulty.

Most probably there will be a tendency to hold the cue too stiffly, or to hold the cue arm too far from the side. Possibly the elbow of the cue arm may be turned outwards instead of working directly over the cue, or the feet and legs may be wrongly placed. To trace these and other faults, imagine a good billiard player cut clean in two, split from head to feet, just as he is in the act of striking the cue ball in the middle. His head, cue, and cue arm would be split into almost equal parts, his left thumb would be lopped off, his right thumb might be grazed and one or more finger-tips of his right hand removed as the cut progressed straight down through the cue. The toes at least of his right foot would be cut off, but as the left foot should not be directly under the cue, that will escape. We have taken our imaginary cut through what may be called a "point to point" journey, as our object is not to reveal a stupendous ignorance of physiological and anatomical details, but rather to show

in a novel manner everything that goes to the making of a real billiard player poised for his stroke. But mark this: there must be no restraint or stiffness associated with any part of the harmonious whole which shows the ideal billiard player ready for action. He must shape his stance and style on a correct mode until the whole thing becomes second nature to him, and is therefore easy. If a good deal of practice on orthodox lines still leaves him feeling stiff and uncomfortable and hankering after the sweets of "his own way," he may well allow himself as much latitude as he can without endangering freedom and accuracy of cue delivery; but he ought not to go far in this direction without seeking the best expert advice. It works out to this—every attitude and action of a billiard player is designed to give smooth and accurate cue delivery; and the experience of countless players has decided that the attitude and action we have dealt with so fully bring about the desired result.

But all men are not alike, and as more than a little divergence in stance and style can be noted even in the greatest players, it follows that provided the cue is swung straight and true without effort, a man, to gain ease and comfort, may, within reasonable limits, shape at his stroke to suit himself. But he should not do this until he has tried his level best to conform to the strict letter of the law of the billiard stylist, and is accordingly able to compromise with his individual requirements without degenerating into downright faulty cue delivery.

Preliminary one-ball practice should be carried out with the spot ball for preference. Place the ball on the centre of the baulk line in such a manner that the spot is exactly in the middle of the ball. Take careful aim straight up the table; swing the cue freely and truly and allow the cue-tip to strike the spot on the ball with commendable accuracy. Let the cue go well into the stroke, so freely that the tip comes to rest on the cloth at least eight

inches beyond the spot on which the ball rested. If the stroke is well and truly played the ball will return straight along the line of spots on the centre of the table and hit the stationary cue point. This stroke should be practised again and again until it can be made repeatedly with ease and confidence at various strengths, and the "aiming spot" on the cue ball should be raised from time to time, so that every upward variation of central ball striking is practised until even pronounced "top" can be imparted with perfect truth. But the smallest deviation from the vertical centre of the ball—that is, the least tendency to impart side—must be guarded against at all costs. The whole reason for this practice is to learn to strike a billiard ball neither to the right nor left in the smallest degree, but always on a line passing through its vertical centre. This stroke cannot be called fascinating; it is more like drudgery; but it is so very necessary that the more it is practised the greater will be the certainty of ultimate

success in all-round billiards. Beginners do not realize this; they want to be "making strokes," usually spectacular, big "screws" or spinning "jennies" for preference, long before they have learned to strike a ball truly. They little think they are as foolish as a young cricketer would be who wished to make brilliant late cuts and daring hook strokes before he had learned to hold his bat straight, yet such is indeed the fact.

It is regrettable that so many people who try to play billiards seem to think that the game is an absolute exception to the rule that proficiency in any branch of sport means hard work to all except the gifted few, and that even they have to work hard to come out on top. No man in his senses would try to row by holding an oar "his own way" during his first attempts at rowing, nor would he dream of attempting to play golf without learning how to hold and swing his clubs. Yet these very men pick up a billiard cue at haphazard,

handle it as their fancy dictates, bang the balls about because their faulty cuemanship prevents them from ever playing a stroke properly, and then vow they cannot understand why "the more they play the worse they play." If these good people would only forget all they think they know about billiards, study the elements of cuemanship, and pass on to a course of one-ball practice, there would be hope for them. They would soon improve out of all knowledge, simply because their reformed game is founded on lines which render proficiency and even perfection only a matter of practice. They cannot hope to improve their present game, because it is largely a fearful and wonderful thing they have evolved out of their own inexperience, a combination of guessing and accidents, a game they doubtless enjoy to an extent, but which is as far removed from real billiards as it is from ping-pong. Billiards is never an easy game; but when once a man is well grounded in its mechanical essentials,

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sufficient proficiency to make breaks of gratifying size is within the reach of any person whose sight and touch are normal. The first and greatest of these mechanical essentials is the ability to deliver the cue with ease and precision. Accurate ball striking follows as a matter of course, and when this is mastered breaks are sure to ensue. But breaks cannot result if indispensable preliminaries are ignored or scamped, and this is why so much stress is laid on the importance of one-ball practice.

When the beginner is able to send the cue ball straight up and down the table at various speeds, and accurately enough to ensure a reasonable sequence of perfect strokes, he may commence with the two-ball game. How much of the one-ball game is advisable may be judged from the fact that George Gray had over six months of it before his father ever permitted him to even see the red ball on the table. Nothing like this can be suggested for a moment to those who

wish to play billiards for sport alone, but the fact is interesting enough to be quoted as indicative to the beginner of the value of one-ball play, and proof positive of the impossibility of overdoing it.

CHAPTER VI

PLAIN-BALL PRACTICE

TAKING it for granted that the pupil has obtained such command of his cue that he can strike the ball fairly and truly, he may proceed with confidence to two-ball billiards—a phase of the game he should practise consistently before attempting to do anything with three balls on the table. And if he finds that his strokes are not materializing as they should in practice it is long odds that his cueing is wrong. An immediate spell of one-ball practice is the remedy, and this should always be adopted without the slightest hesitation when the percentage of failures in scoring strokes is greater than it should be. It is a costly mistake to imagine that one-ball practice is altogether a thing of the past

simply because it has taught a man the elements of cuemanship. Many amateurs who make respectable breaks at times would do well to test their cueing by a little one-ball practice when they are "dead out of form." More likely than not they will discover that their ball striking is anything but central, and their form will return when practice remedies this fault.

Mention of practice brings to mind a point which really ought to have been dealt with before. This relates to the connexion between physical fitness and billiard practice. It is a fact that old-time professionals used to train for billiard matches. Long walks and attention to diet and drink, especially the latter, formed part of the routine, to which was added a great deal of individual practice, often behind locked doors, for in the days when big betting on billiards was customary a good deal of secrecy was maintained concerning the real form of contestants in an important money match. Amateurs may

learn from this the important fact that any course of life which tends to upset the nerves or sight is bad indeed for billiards, and that individual practice under conditions permitting undisturbed concentration is most valuable. Some men are lucky enough to be able to fix their mind on solo practice on one of several tables in a room full of players, but such detachment is rare. The average temperament is too self-conscious and sensitive to render individual practice possible under the circumstances. A table in the middle of a ten-acre field would appeal to many beginners, especially if they have reached that period of life when a man's dignity is easily upset. Such players should seek the private table reserved in many high-class billiard-rooms, or else frequent a room fitted with but one table, taking care to appear on the scene at a time when the table is not likely to be in request.

These points are well worth care and consideration, for the importance of indi-

vidual practice under reasonable conditions cannot be too strongly insisted upon. John Roberts says that billiard practice should be taken when both mind and body are fresh, and when a man has nothing else to think about. This advice is most excellent, but it is to be feared that few amateurs are in a position enabling them to follow such a counsel of perfection. Billiards appeals to most men as a recreation after business hours, and they are compelled to make the best of what practice they can get at such times. This is all the more reason why they should concentrate their mind on the game while they are at it, for it is as certain as anything can be that a man might as well put up his cue as attempt to practise or play while his mind is running on other things. Billiards is very exacting in this respect, and therein lies the outstanding merit of the game as a true recreation. A man simply cannot play billiards if he is worrying about the Kaffir market instead of thinking about

his stroke, or bothering about black settling-days instead of studying the run of the balls.

The red ball should be placed on the table when two-ball practice is commenced, and here it is as well to remark that just as a streak of red runs through a piece of Admiralty rope, so proper attention to the red ball should be continually in evidence right throughout good billiards. Not only are red-ball strokes profitable, a third more lucrative than similar strokes off the white ball, but there is also the important consideration that the red ball is never off the table. It is never lost to the game, for if pocketed it is spotted for the next stroke. On the contrary, once the white object ball is "downed," the player has to make the best show he can off the red ball alone if he wishes to score. It has been argued that this constitutes a blemish on billiards, as the game, to be logical, should reward all strokes strictly in accordance with their intrinsic merits without regard to the colour of the

ball played on. Therefore, say the critics, all scores at billiards should be of the same value, and all strokes subject to similar conditions—when the white is “potted” it should be spotted and thus retained in the game. This mode of reasoning seems fair enough at first sight, but is not quite so convincing after it has been thought about. The crux of the matter is that much of the art of billiards lies in steering the red ball instead of the white into favourable scoring positions, and there is surely no reason why such art should not be well rewarded. Broadly speaking, and laying down a rule to which we admit there are many exceptions, it may be said that the true function of the white object ball in billiards is to be kept in waiting, to be held in reserve, ever ready to be played upon in such a manner that the red ball is brought into the game with the least possible delay. This does not mean that huge breaks off the red ball alone constitute the highest billiard ideal—it means that the beautiful all round

three-ball game of English billiards utilizes the object white for positional rather than scoring purposes, the dominant note of the game being to score as often as possible off the red ball without playing over and over again either the same stroke or series of strokes. For instance, in a break of 534 made by Dawson against Stevenson in a match for the championship, no less than 267 points were scored off the red ball, yet the break was so very open and all-round that at one period Dawson had to make three losing hazards off the white ball in succession before he could set up the desired cannon position which offered a return to the top of the table, where the red ball yields such a fine harvest of points.

Before actually making a stroke at the red ball, it is necessary to say something concerning the direction the eyes should take when a stroke is made at billiards. Opinions differ on this point. It has been contended, by no mean players, that the cue ball should be kept steadfastly in view

until the cue-tip is brought into contact with that ball. Other authorities argue that the object ball must be looked at the instant a stroke is made. Old Captain Crawley is very emphatic on the point. He says: "Eye and hand should act in unison; and what one sees to be possible the other should be practised to accomplish. In making your stroke, an instantaneous glance will be sufficient—a glance that rises from the striker's ball to the object ball, and rests *there* while the stroke is being made. As the rifleman looks at the target rather than the muzzle of his piece when taking aim—as the cricketer has his eye on the wicket at which he is about to bowl rather than the ball in his hand—as the boy fixes his attention upon the sparrow he wishes to hit rather than the stone between his fingers; so the billiard player must give his mind to the object ball rather than to his own." This is expressed forcibly enough, but the worthy captain as well as those who argue dead against him overlook the possibility

of seeing both the cue ball and the object ball at the moment of making a stroke. Yet this must always happen when the balls are close together, and holds good regarding many other strokes when a player favours a stance which brings his chin close to the cloth. But when it is impossible to see both balls at the instant of cue delivery, which is not so often the case as is generally supposed, the best and most natural thing to do is to fix the sight on the point aimed at. First of all, however, the eye should estimate and decide upon the spot on the cue ball which must be struck, and the bridge and cue arm should be adjusted in such a manner that provided the cue be swung truly the desired spot must be hit. If this is done properly, the stroke is three parts made, as the eye has really finished the most important part of its work. It has decided at first glance the nature of the stroke to be played, it has next settled upon the portion of the cue ball to be struck, and in obedience to what the eye tells the

player takes his position and shapes for his stroke. Then, if his cuemanship is beyond reproach, the rest is perhaps more mechanical than anything else. As a matter of fact, provided the eye directs the essential preliminaries aright, it is possible enough to make the actual stroke without looking at the balls at all. The elder Roberts, just for fun, often sighted a stroke, swung his cue, and then looked over his shoulder right away from balls and table when making the stroke. He usually scored, too.

This whimsicality of the old-time champion shows as nothing else could what cue delivery means. His cue delivery was so exquisitely accurate that he could depend upon it to make a stroke without his eyes helping in the least when the balls were struck. On the contrary, his eyes must have handicapped him when he indulged in this "blind shot," as the turn of the head which deprived him of a sight of the balls must have tended to destroy that perfect body balance in-

separable from such cuemanship as his. No doubt he allowed for this handicap, which makes the stroke the more wonderful. In our opinion, the first and most important use of the eyes in billiards is to judge correctly the stroke demanded by the lie of the balls. As regards sheer sighting at the moment of aiming, the strain on the sight is nothing like so great at billiards as it is in shooting, especially rapid shooting. The range is absurdly short when viewed from the standpoint of the rifleman or gunner, and the target is made as plain as the best of lighting and strong contrasts in colouring can make it. True, the point aimed at is but tiny when compared with a bull's-eye or artillery target, but, in spite of this, the margin of permissible error is so great in billiards that aiming faulty enough to send a bullet or shell clean off the target often scores points at billiards. But there is a limit, and that limit is reached times out of number when the eye does not gauge the stroke at all well. The work of the

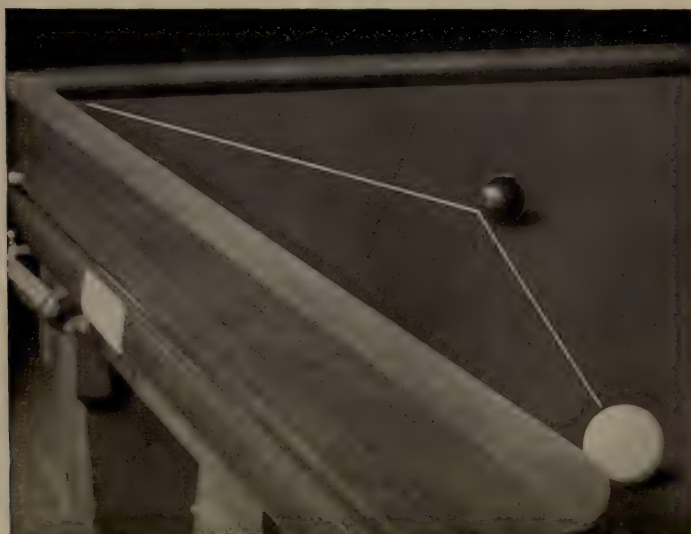
eye in this respect may fairly be compared with that of a range-finder, and it is scarcely necessary to explain that if the range-finding is bad the best aiming and gun-laying in the world are simply wasted. So it is with billiards. If the eye tells a player that a natural angle stroke is something else altogether, and a correct stroke is made at this "something else," then, bar flukes, the other player will be wanted. This is a fatal fault in billiards, and much more common than inability to hit any desired part of the object ball. Indifferent cuemanship resulting in faulty striking of the cue ball, and bad judgment regarding the portion of the object ball which should be struck to score points—these are the besetting billiard sins of the man who seldom makes a twenty break. Actual aiming has comparatively little to do with it. Take a player of this class, selecting one whose cuemanship is not altogether hopeless, and let a professional tell him just where to aim to make his strokes, and how to place

his ball when playing from hand. The result is always surprising, sometimes astonishing, which proves plainly enough that aiming at billiards is not inordinately difficult—the trouble is to know what to aim at.

It is, of course, assumed that everything we have written on sight in billiard playing applies exclusively to those whose sight is fairly good. Abnormal power of vision is not essential, although helpful when present. Given fair sight, either natural or assisted by glasses, there is nothing connected with the eyes to prevent a man from playing good amateur billiards. Those who wear glasses should have a pair made on purpose for billiards by a good maker, as when a player bends to make a stroke he is apt to look over the rims of ordinary glasses. The man who has to wear glasses need not despair of becoming rather more than useful at billiards. One of the best amateur cuemen ever seen in London wore glasses constantly, but this did not prevent him from

making hundred breaks galore on standard tables. Given normal vision, the main thing to study is to train the eyes to direct the judgment, to gain that knowledge of the game which enables the sight to tell almost at a glance what the stroke really is which ought to be played. This knowledge can only be gained by careful study and practice, and is founded on a perfect comprehension of what happens when a moving billiard ball comes in contact with the stationary object ball or a cushion.

Leaving cushions out of the question for the time being, the first thing to know and recognize is what is called in billiard parlance the "natural angle." This is the angle a cue ball struck in its centre makes after half-ball contact with an object ball. By half-ball contact is meant that contact which takes place when the centre of the cue ball is directed against the outside edge of the object ball. The actual point of ball-to-ball contact is immaterial for practical purposes—what does matter is that the



A TYPICAL HALF-BALL LOSING HAZARD (p. 108)

A FAMILIAR CROSS LOSING HAZARD OFF THE SPOTTED RED
(p. 111)

point of aim is taken from the centre of the cue ball to the outside edge of the object ball. It is very important indeed that no side should be imparted to the cue ball, and that this ball should not be struck below its centre. In fact, in actual play, cue contact above the horizontal centre of the ball is to be preferred for many natural angle strokes, as perfect forward rotation is thereby imparted at once, and any tendency towards screw effect avoided. This tendency is far from negligible when the cue ball is close to the object ball for the class of stroke, say, from eighteen inches to two feet six distant. Then cuemanship has to be very crisp and clean to make the half-ball stroke to perfection by striking the cue ball exactly in its centre, and it is far safer "to put a little top on the ball," as the saying goes in billiard circles. But as the vertical centre of the ball must always be struck, and the strikeable surface of the cue ball is much less than is generally supposed, it must be remembered that the higher

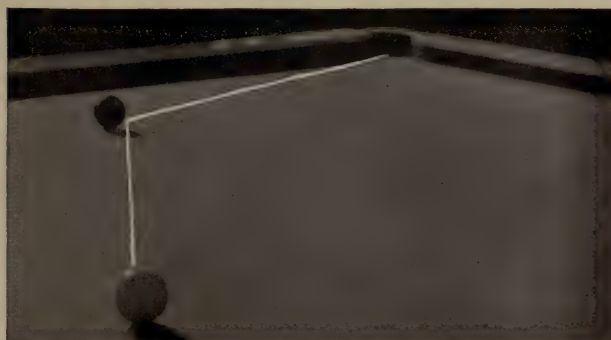
the ball is struck the greater the difficulty of ensuring the indispensable central cue contact on the vertical centre of the ball. After all, however, the variations of cue contact from the centre of the ball upwards are but slight in natural angle play, and very easily mastered when once the cue-tip can be depended upon not to stray from the vertical centre of the ball.

The natural angle, brought into being as described in our preceding paragraph, has been defined with great exactitude by gentlemen of a mathematical turn of mind. These efforts are most praiseworthy, but it is doubtful whether the elements of billiard playing are constant and accurate enough to provide a satisfactory basis for mathematical calculations. True, billiards is a scientific game, but, for all that, compensations, approximations, and personal variations provide unknown factors formidable enough to discount the practical value of calculations based on a method nice enough to tell us within a few yards how far the sun will be from us this time

next year. The point which concerns billiard players is that the half-ball contact provides certain known results, and that these results are constant enough to provide an effective "known quantity" from which any other stroke in the game can be computed. We know that by striking the cue ball as described, and taking aim through its centre at the outside edge of the object ball, the natural angle results. This angle is destroyed by great force, and can always be made unless the balls are too close together—the limit in this direction can easily be ascertained by a few trial strokes, and is best discovered in this way, as it encourages the pupil to experiment and find out things for himself. The natural angle with ivory balls of standard size and equal weight, which were used in all the strokes dealt with in this volume, is exhibited in the following manner: Place the red ball on the billiard spot and the cue ball on a line taken from the centre of either of the top pockets to the centre of the red ball.

The natural angle is now certain to send the cue ball into the opposite top pocket, provided a plain half-ball stroke is played on the red. This stroke should always leave the red ball in a favourable position for a losing hazard from hand into the middle pocket, and should be practised until this leave is made as certain as the actual hazard. It should also be practised into each of the top pockets to accustom the eye to the half-ball angle from each side of the object ball : this rule should be observed whenever half-ball strokes are practised, or any other stroke for that matter, as it is only too easy to acquire a detrimental bias in favour of practising strokes too frequently on that side of the object ball which appeals to the striker.

The next set position for the half-ball stroke finds the red ball still on the billiard spot, but the cue ball is placed on a line drawn from rather above the centre of the middle pocket and ending at the centre of the red ball. Played to perfection, the half-ball stroke will send the red ball



LOSER BADLY PLAYED—TOO THICK—SIDE ON CUE BALL
 HALF-BALL LOSER PLAYED PROPERLY

straight up and down the table from this position, the ball passing clean over the line of spots. This ideal should be striven after, and the stroke practised from the opening of the middle pocket up to the closest range of the natural angle. Play it freely when the cue ball is near the side cushion, freely enough to send the red in and out of baulk, as although it is possible enough to play the stroke from this position so slowly that the cue ball barely reaches the pocket, yet the free stroke is more certain and should always leave the red ball well placed. It is not, however, the game to play this stroke so freely if the non-striker's ball is in such a position that the red is likely to kiss it during its progress down the table from the top cushion. Then the small amount of extra risk inseparable from playing the stroke rather slowly must be faced, but on all other occasions the surest method of making the stroke should be preferred. This brings us to a point in billiard tactics of the utmost importance, which is that

provided after position is not unduly neglected, the most certain method of scoring should always be utilized. It often happens that the balls offer several distinct opportunities of a score, or it may well be that the same score can be effected in a variety of ways. Then the easiest stroke which is positionally sound should be made every time. Perhaps a stroke of this type will not offer that ideal after position which appeals to the billiard artist, but if it can be played with a reasonable certainty of leaving something quite good enough to go on with, then it should never be neglected in favour of something more clever and beautiful, but tainted by an element of uncertainty which can and ought to be avoided.

Another half-ball stroke can be set up by placing the red ball on the pyramid spot and the white ball on the corner spot of the "D," or very slightly inside that spot. A half-ball hazard can now be made into the top pocket facing the player, and the red should be brought round off

the top and side cushions into position in the centre of the table. It will be found that after position is rendered more certain by playing this stroke from as far towards the centre of the "D" as the striker's ball can be placed without destroying the natural angle. Experiment will show that very little latitude is permissible, but that enough can be taken to make an appreciable difference to after position, especially if the cuemanship is very sharp and clean. Last, but by no means least, we have the losing hazard from hand when the red ball is on the centre spot of the table. To make this, place the cue ball about seven and a half inches from the outside spot of the "D," and play a plain half-ball stroke into the top pocket. This stroke is never too easy, as the cue ball has so far to travel after contact that any error has room in which to assume dimensions enough to spoil the shot. Played correctly, this stroke should bring the red ball round off the top and side cushions into position over the middle pocket.

Some players find they can sight the stroke better by placing the cue ball behind the baulk line, taking care, of course, to preserve the natural angle. This beautiful and effective stroke should be practised continually until it can be made with confidence into either top pocket, and the object ball brought well round every time. No finer test of accurate ball striking and freedom of cue delivery could possibly be desired. The stroke is so good in this respect that it is much favoured by professional players who wish to get their cue-arm working nicely after a period of absence from the table. They know very well that when they can make this swinging hazard in satisfactory style according to their standard of proficiency, then their general cuemanship is tuned up to concert pitch, and they can go ahead with their all-round practice with every confidence. If this is true of professional players who have devoted years to the game, amateurs may conclude for themselves how important

the stroke is to them. Other set positions for the half-ball stroke could be enumerated, but those already given are quite sufficient to enable the player to become familiar with the natural angle.

Having gained this familiarity, the next thing is to make use of it by playing as many half-ball strokes as possible from baulk. This general principle, when put in practice, makes a man one of those sound, reliable, steady hazard strikers who are such a terror to the flashy type of player. The point is that the losing hazard striker always has the great advantage of placing his ball where he pleases within the baulk half-circle. Very little thought will show what a potent means of scoring this is in the hands of a man who has even a fair command of it—George Gray has shown what absolute mastery of it means. But ordinary mortals cannot hope to get anywhere near the exquisite positional precision of the world's greatest exponent of red-ball billiards. They cannot hope to bring the red ball back to perfect

middle-pocket position over and over again, but they can try to leave the ball so that a natural angle losing hazard from hand is presented into one of the four pockets before them. This is a reasonable ambition, and the first step towards realizing it is to know and appreciate the area in which the object ball must be left to offer a natural angle losing hazard into either of the four pockets ever open when playing from baulk. It is quite simple to measure this area and define it by means of a diagram, but it is infinitely better to leave the player to work it out for himself. He can begin with any pocket he may fancy, and vary the positions of both the object ball and the cue ball until he satisfies himself that he has exhausted the half-ball possibilities of that pocket. Then he should proceed to treat the other pockets in the same manner, and by so doing he will be making real progress towards that instant recognition of the natural angle which is the backbone of English billiards. At the same time he

will be constantly reminded of the awkward fact that no inconsiderable area offers what may be called "safe cover" for the object ball—that is, of course, positions from which the natural angle is not playable. The fact that an easy stroke of another type is offered should be ignored for the time being, and the whole energies of the player devoted to gaining a sound knowledge of the zone of table space within which a ball can be left open to the familiar and profitable half-ball loser. Such knowledge, gained by individual experience, is worth more than all the diagrams ever drawn, and it is really well within the reach of any player who by following our text and illustrations is learning cuemanship, accurate ball striking, the half-ball stroke and the resultant natural angle. But it must never be forgotten that these things are all part of a whole, and that if strokes are not working out properly a return should be made to cue swinging and one-ball practice. It is long odds that these essentials are

not quite as they should be, especially as regards striking the vertical centre of the cue ball. It is an even chance that the angle is being misjudged when placing the ball in the baulk half-circle, but it is odds against failure to direct the centre of the cue ball straight towards the outside edge of the object ball. And whatever the cause of failure may be, it is necessary to eradicate it by a timely return to preliminary practice, thus checking a fault at its commencement and preventing it from becoming stereotyped.

CHAPTER VII

CONCERNING IMPLEMENTS

AT this stage we may as well deal with some appliances which ought possibly to have been mentioned before. These are the implements which have to be used when a player cannot reach the cue ball in the usual manner. The rest, sometimes called the “jigger”—an old name for it, by the way—is easily first on the list. It often has to be used, especially by short players, but it is safe to say that the rule relating to the use of the rest is more honoured in the breach than the observance. The rules state that one foot must be on the floor when a stroke is made at billiards, but some people, far too many people, will insist upon committing a deliberate foul by playing a stroke with both feet in the air. They say, “Oh! I can never make a stroke with the rest, the beastly thing!”

and forthwith clamber on the table without further ado. Sometimes they say nothing, but get on the table as a matter of course. This practice is so prevalent that it has its standard joke, of the "No, thank you, I can reach it" type, in which a very stout gentleman is depicted sprawling at full length over the table, desperately intent on making sure of a simple shot.

This kind of thing may be indifferent gymnastics of sorts, but it has no possible connexion with real billiards. Apart from any question of its elegance and fairness, it simply ruins the cushions and is by no means good for the cloth. A billiard cushion worthy of the name is a beautiful piece of workmanship. Clever craftsmen have fashioned it with skill gained by years of training; important patents govern its constructional perfections; and it is made of the very best materials that money can buy. Then, when it is quite ready to play its part in one of the most beautiful games in the world, ever so many stones of fat humanity

flops down on it simply because—"It is such a bother to use the rest." After a severe course of this maltreatment a real player happens to use the table and finds the cushions faulty, then the owner writes to the makers and says he cannot understand why the cushions on his table have gone wrong. All this bother and expense can be avoided by using the rest, to say nothing of the fact that until this implement is mastered it is out of the question to play billiards.

To use the rest properly it is necessary to keep in mind the elements of cueman-ship. The head of the rest must be as firm and rigid as the ideal "bridge," and the best method of ensuring this result is to place the whole handle of the rest flat on the table, as shown in our illustration. It should be noted that as a rule the flat side of the rest must be laid on the cloth, thus ensuring a central striking of the cue ball. The other method, too often employed indiscriminately, should only be used when it is desired to strike the cue

ball well above its centre. The main point of difficulty is the difference in the "feel" as the cue slides over the rest head. It is so strange after the touch has become accustomed to the softer and more responsive effect produced as the cue works over the left hand. At first it feels as if the cue is slipping clean away from the player, and there is nothing for it except practice to gain a thorough practical acquaintance and familiarity with the use of the rest. Many useful players have been compelled to "hark back" and take up this practice late in their billiard careers, as they find that in handicaps and match play, and even ordinary games between skilled amateurs, the "get on the table" idea is not tolerated for a moment, however much it may be winked at during happy-go-lucky contests between friends.

Even at its best, however, the rest can only be written down as a necessary evil, of which the "spider" is an exaggeration, and the "half-butt" and "long rest" an

inevitable extension. The use of the "spider" is well explained by our photo. Great steadiness and judgment are required to place the "spider" properly and use it at all effectively, especially as the decided downward thrust of the cue imparts a semi-masse effect to the stroke. Perhaps the best point in favour of the "spider" is that it is very seldom wanted—it has been stated that a championship game of eighteen thousand up has been decided without this implement ever being called into requisition. But when the "spider" is needed it provides the only possible solution of the difficulty facing the cueman at the moment, and as this may well mean all the difference between making a break and ending it, it behoves all cuemen to gain at least a fair working knowledge of the possibilities of the "spider." At pool games, especially the popular "snooker," the "spider" is much more likely to be in demand, and, taking everything into consideration, a young player will find a tiresome half-hour or two spent in

experimenting with the "spider" by no means a waste of time.

The "half-butt" and "long rest" are merely lengthy editions of the ordinary rest and cue rendered necessary by the fact that certain strokes cannot be played without their assistance. They are clumsy instruments, but far too often in evidence to be neglected. Their weight and general lack of handiness render them far from popular, especially the "long rest," commonly called the "fishing rod," on account of its tendency to bend and wobble. It is most difficult to gauge strength and cue-power when using these implements, and even a fair amount of accuracy in plain-ball striking calls for more than a little practice before a player can always command it when handling the "fishing rod," or its smaller brother, the "half-butt." Here, again, there is nothing for it except practice, and as few indeed will be thorough enough to indulge in solo practice of this description, the only thing to do is to make a hard-and-fast rule never

to shirk a shot which calls for the use of “all the timber,” as the billiard-room saying goes. Such a course of action, rigidly adhered to, will soon accustom the player to make the most of what assistance he can get from those indispensable adjuncts to the game—the “half-butt” and “long rest.” Care should always be taken to see that the tips of these implements are properly chalked—the marker will always declare that they are, for such an assertion is second nature to almost every marker, and is apt to be made without regard to the strict truth. Another point worth remembering is that it is not fair for the marker to give the “distance” between the tip of the “half-butt” or “long rest” and the cue ball. This is often done, but is really a point the player should settle for himself. While on the subject of rests in general it is as well to point out that if a player allows the marker to place any of these implements on the table or remove them after a stroke, the striker can be pulled up for a foul if any of the balls are

disturbed through the marker's actions. The point is that he is deputizing for the player, and carries a responsibility analogous to that of a cricketer running between the wickets for a lame batsman. The moral is that the marker should never do more than hand to the player what rest may be required, and take charge again when the stroke has been completed and the rest lifted clear of the table.

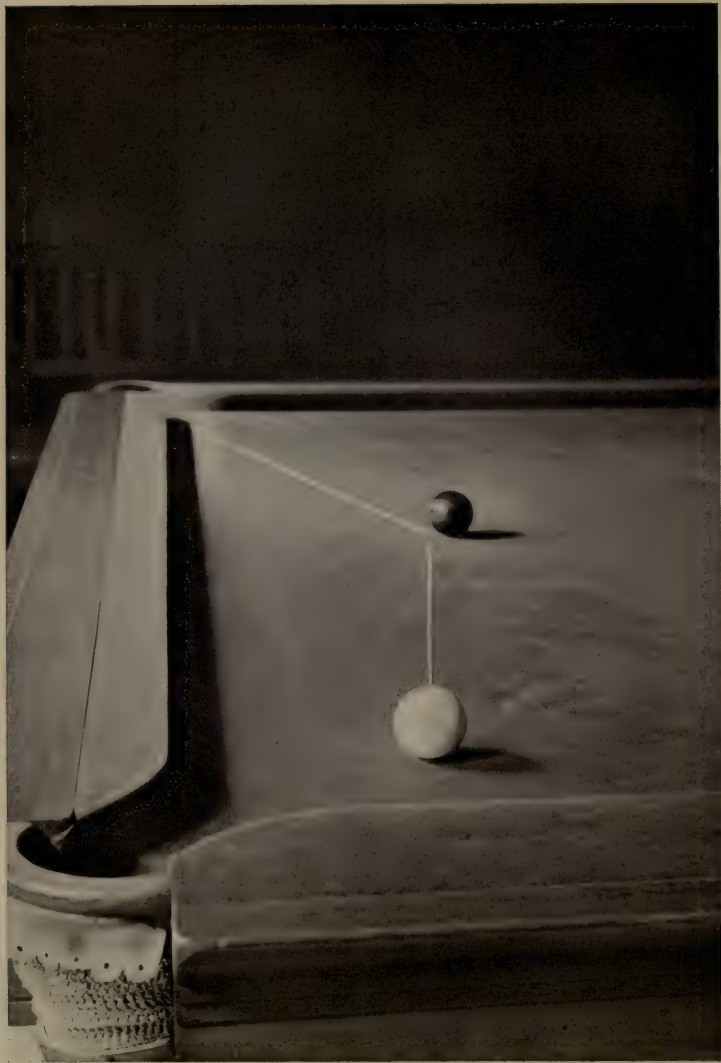
Playing behind the back is a well-known and effective means whereby overmuch use of the rest may be avoided, and should certainly be practised. It is by no means difficult when once the knack is acquired, but from the first the cue should be passed neatly behind the back of the player somewhere in the vicinity of the waist line. Some players wave the cue about and swish it round in terrifying fashion when essaying to play a stroke behind their back, a needless and rather dangerous waste of energy—the probable moral effect on the nerves of an opponent is not worth considering—and the practice should not

be cultivated unless it is desired to spit the marker or slash inoffensive spectators. Another method of “dodging the rest” is to become sufficiently ambidexterous to play many strokes equally well with either hand. Most of the first-class players can do this—Charles Dawson was particularly good at it—but it is, nevertheless, a refinement best left alone until a man can play really well with the one hand Nature compels him to rely upon for preference.

CHAPTER VIII

FINE STROKES AND FOLLOW- THROUGH EFFECTS

By now the pupil has gained a good idea of what can be done by striking the cue ball in its centre or slightly above it, and directing the centre of the cue ball towards the outside edge of the object ball, thus producing the half-ball contact and the resultant natural angle. He now has a known quantity at his disposal, and from it he can judge a tremendous variety of strokes without ever departing from plain-ball striking. He will find that by aiming to strike the object ball finer than the half-ball he can obtain almost any desired angle of departure from the object ball, and a fine stroke of this type is shown in our photo of a thin losing hazard off the spotted red. For strokes of this type the cue ball should be struck rather above



A FINE LOSING HAZARD OFF THE SPOTTED RED (p. 130)

its centre and briskly, thus ensuring a quick, shimmering ball-to-ball contact and a true run of the cue ball towards the pocket. The secret of success with these fine strokes lies in shaping for them properly, and it is absolutely necessary to make sure that the feet are in the right place for the stroke. The point of aim, taken from the centre of the cue ball, is some distance clear of the edge of the object ball; and nothing can be more fatal than to place the feet for, say, the half-ball stroke, and attempt to make the necessary adjustments for a fine stroke by swaying the upper part of the body. Such a fault is directly against the first principles of cuemanship, and, although very common, is really leaving to luck what should be a matter of accurate and considered judgment.

Bearing in mind the fact that the plain half-ball stroke played to perfection throws the "widest" normal angle, to use a word as familiar to billiard players as it is strange and uncouth to the stern mathema-

tician, it is easy to understand that every variation of contact from the half-ball to the merest graze gives a different result, and it is not too much to say that the more a man knows about the beautiful variety of effects obtainable from this one simple cause the better player he will be. It is usual to divide the object ball up into quarters or eighths and nominate certain well-defined strokes accordingly. This answers well enough as a stepping-stone to better things, but is not nearly comprehensive enough to produce anything like a finished player. It is far better, after making the half-ball stroke a reliable servant, to experiment carefully with every appreciable variety of normal ball-to-ball contact either "thinner" or "thicker" than the half-ball. Remember that the line of aim is always through the centre of the cue ball to the spot on the object ball which denotes the correct line in the case of a stroke "thicker" than half-ball, and to a point clear of the edge of the object ball in the case of strokes "thinner" than

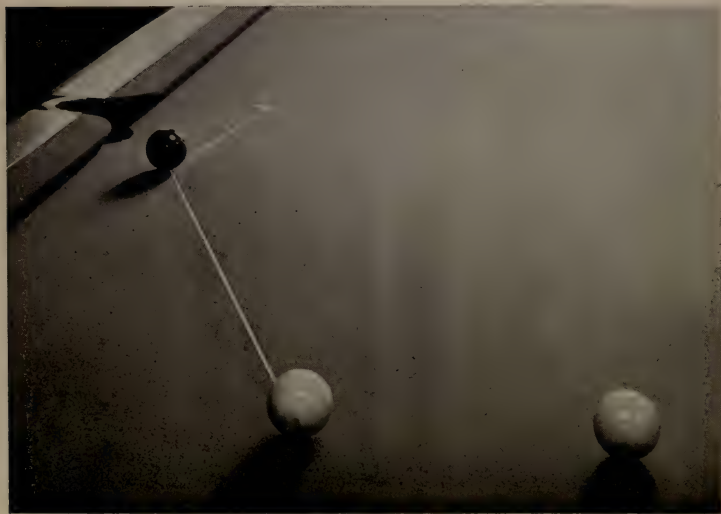
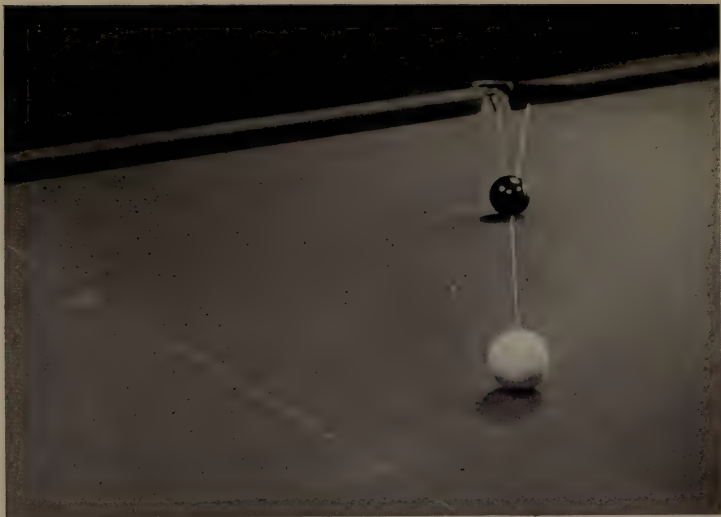
VARIATIONS FROM ANGLE 133

half-ball. The actual points of ball-to-ball contact are immaterial and even confusing—the essential consideration is that by taking aim from the centre of the cue ball to the outside edge of the object ball a well-known effect is produced when a normal plain-ball stroke is played, and the only knowledge of practical use to the player is that gained by ascertaining the effect produced by every appreciable variation of the line of aim from that which gives the familiar natural angle.

Mention of contact “thicker” than half-ball brings us to what is known as the “follow-through” stroke. This stroke often demands a high striking of the cue ball, commonly known as “putting top on a ball.” Those who have mastered central-ball striking, with a nice, flowing cue delivery, will find it quite easy to put as much “top” on as they want. It is only necessary to shift the point of cue contact as high on the cue ball as can be managed without either abnormal cue delivery or risk of a miscue and the thing

is done. Freedom is very essential, the cue must swing truly and well or the strong forward rotation which "top" alone can impart to a ball is not to be even hoped for. But it is altogether a mistake to imagine that a "follow-through" stroke cannot be made unless "top" is used to a pronounced extent. As a matter of fact, provided the cue delivery is good, the pace normal, and the cue ball not too close to the object ball, a "follow-through" effect is obtainable even with central-cue contact, but in practice is usually played for by striking the cue ball slightly above its horizontal centre without, however, raising the cue-tip high enough to impart decided "top."

"Top," pure and simple, is seldom used alone unless the cue ball has a considerable distance to travel after contact with an object ball fairly close to the striker's ball; then the amount of force required would spoil everything unless "top" was requisitioned, as the thick ball-to-ball contact at close range with considerable



TWO POSITIONAL RED WINNING HAZARDS (pp. 136-137)

force kills any approach to a “follow through” unless “top” is present. It is curious to watch the effect of “top” under these conditions — the cue ball seems to stop almost dead at the instant of ball-to-ball contact, and then, as the strong forward rotation takes effect, it rushes forward like a thing of life and will travel a surprising distance. But it is very difficult indeed to judge exactly what the ball will do when it pauses before starting forward in real earnest. Both aim and cuemanship have to be exquisitely true or the stroke is sure to be missed if the cue ball has a considerable distance to travel to effect a score, especially if a pocket is aimed at. For this reason “top” should be avoided as much as possible, and should never be used indiscriminately, owing to the mistaken idea that a “follow through” cannot be made without it.

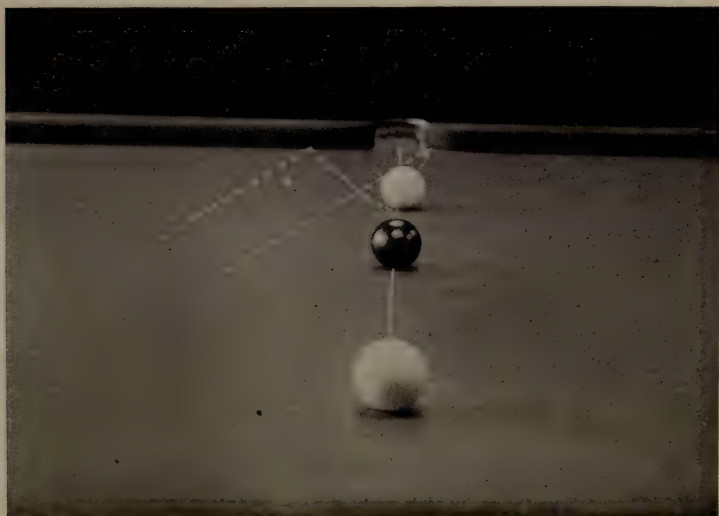
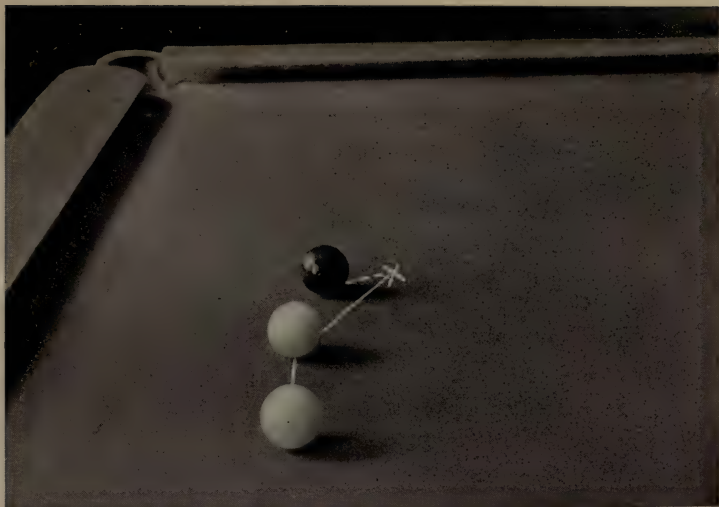
A trio of pretty shots will serve to make this point clear. They are all “follow-through” strokes, but in each

case the cue ball is only struck slightly above its centre, not nearly so high as is the case when real "top" is necessary. The first example is a "kiss" cannon which provides the solution of an interesting problem. As the balls lie the position is anything but promising. There is no room for the cannon by means of a direct "follow," and the correct stroke to play is a "run-through" cannon, which sends the object white against the left edge of the red and just "chips" it over far enough to meet the on-coming cue ball. This is a most effective stroke, and calls for both touch and judgment. It is by no means easy, but presents no inordinate difficulties if set up on the table, as shown in the photo, and practised quietly and steadily. Played properly it leaves good position at the top of the table, and as it only calls for ordinary cue-power, it should be mastered by any amateur enthusiast. Another "follow," and a good deal easier specimen, is displayed in the winning hazard into the

middle pocket. Here, of course, the main object is to avoid the six shot, and play the stroke with just the right strength to leave a natural angle half-ball loser to follow off the spotted red. Strokes of this type are continually cropping up, especially when playing from hand, and it must never be forgotten that to pocket the red alone is bad billiards unless the cue ball runs on far enough to secure a good leave. Usually, unless the object white happens to be well placed for a scoring sequence from hand, it is simply murdering the break to make a six shot, and it is, therefore, well worth while to cultivate this description of stroke in all its variations. Always strive to put the red down and leave the cue ball in good position, even if so doing makes the winning hazard more difficult. Just by way of encouragement, before completing our trio of promised strokes, we will insert a photo showing a simple variation of this positional winning hazard. In this case the cue ball is struck a little low

and to the right, the idea being to "pot the red" and steer the striker's ball into convenient position for the half-ball loser to continue with.

Our third example of the "follow-through" stroke is worth very careful study. It is one of those strokes which demand, perhaps, more knowledge of the game than actual execution. At first sight it appears as if there is nothing much on except a white "plant" played rather slowly to leave a feasible stroke of sorts off the red ball. If, however, the cue ball is struck slightly above its centre and by no means hard, and careful aim taken to hit the red a mere shade to the right of its centre, that ball will turn just a trifle to the left and send the second object ball against the corner of the pocket, from whence it will rebound into favourable position. Meanwhile the red will take a fresh angle after contact with the object white and come to rest not very far from that ball. The cue ball continues in practically the straight line,



A RUN-THROUGH KISS CANNON (p. 136)
A USEFUL FOLLOW-THROUGH LOSER (p. 138)

THE "FOLLOW THROUGH" 139

the contact with the red having been central enough to ensure such a result, and enters the pocket readily enough. This stroke is made very clear in the photograph, where the continuous line shows the path of the cue ball, while dotted lines indicate the track of the two object balls. The stroke is most useful and instructive, not only as a typical "follow through," but also as a splendid example of the effect of those infinite graduations in ball-to-ball contact already mentioned.

CHAPTER IX

“SCREW”—“DRAG”—AND “SIDE”

MENTION of “top” in our last chapter draws attention to “screw,” if only by reason of the absolute contrast. Screw, or “twist,” as the old school of players termed it, is imparted by striking the cue ball well below its horizontal centre. At the instant when the cue-tip touches the ivory the cue is momentarily checked by tightening the hold on the cue-butt; and the result is that if the ball-to-ball contact is full the cue ball will return straight to the striker. What happens is that the very low cue contact compels the cue ball to spin strongly towards the striker while the general propulsive power of the cue is urging it forward. The forward movement is destroyed by the full contact with the object ball, thus leaving the backward spin free to do its work. This spin is the

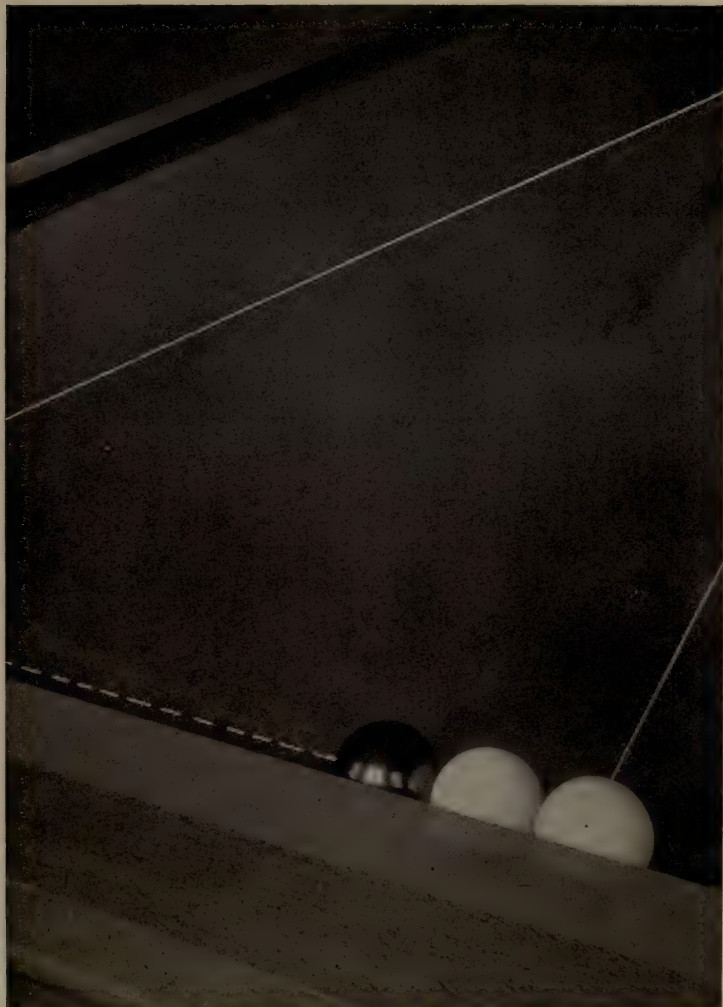
secret of the whole stroke. It is no use striking the ball low in a dead, poky sort of way, and then wondering that no "screw-back" results. The stroke must have life, plenty of life, or the indispensable spin cannot be created, and failure is certain. The cue, in spite of the momentary check at the instant of cue contact, must go through the ball or the backward rotation cannot be accomplished. As a matter of fact the check is so slight that it is possible enough to screw a ball back without gripping the cue-butt in the least, without even holding it, for that matter, as a screw stroke can be made with the cue-butt lying flat on the fingers. This, however, is a refinement in cue delivery of no practical value; it is merely mentioned to prove that it is by no means necessary to grip the cue-butt stoutly when attempting a screw stroke, and that the stroke is really made by poisoning the cue in such a manner that the check action takes effect just at the right point towards the termination of the cue swing, and is

so transient that the cue passes on "through the ball."

Confidence is almost everything when it comes to making screw strokes. It is doubtless true that abnormal "screw-backs" are only possible to those who are gifted with inherent cue-power far above the average, but this does not alter the fact that the ordinary cueman can easily obtain sufficient command of the stroke to meet with every requirement of his game. A certain amount of knack is required, knack which only practice can give, but the stroke is by no means so difficult as beginners often consider it to be. Maybe, they fear cutting the cloth, but they need not, as it is impossible to even mark the cloth if a screw stroke is made properly. The stroke is not a stiff, vicious, downward dig at the ball, but a nice swing, with an indescribable flick which supplies the requisite check in the cue movement and sets up the powerful reverse "twist." Once this fact is grasped, the fact that the stroke is a matter of exquisitely timed



SCREW STROKES (p. 111)



AN EASY "WAY OUT" (p. 223)

movement, and not a mere matter of bringing the cue-tip to bear on the bottom of the ball, then a useful mastery of the stroke follows as a matter of course. It is not worth while to strive unduly for the "big screws"—they can be left to those who are gifted that way; the average amateur may rest content if his "screw power" will pass the following test: Place the red ball on the centre spot of the table and the cue ball rather more than a foot behind it in line with the two middle pockets. If the six stroke can be made with certainty every time, pocketing the red in the one pocket and screwing back into the other—the cue ball having occasionally quite a useful amount of run on it as it enters the pocket—then the player may fairly credit himself with the possession of as much "screw power" as he is likely to want.

Once a player has reached this stage he has gained definite knowledge of a fixed point which he must never forget. He knows that by striking the cue ball in a

certain place and in a certain manner he can obtain a screw effect which is thoroughly familiar to him. This is all he wants to know; it is quite a mistake to attempt to vary the amount of screw to meet with different strokes. More or less force may be required, and the point of ball-to-ball contact is continually changing, but the cueing, as regards contact between cue-tip and the spot to be struck on the cue ball, need never be varied. Really, it cannot be varied to any appreciable extent, as the strikeable surface of a billiard ball is a good deal less than many people think, and the portion of the ball which must be struck to produce any screw effect is by no means great, and the part of the ball which must be struck to produce the maximum of screw effect is ever constant and unchanging. Yet nothing is more common than the remark, "Oh! I put too much screw on the ball!" or it may be that "too little screw" provides an excuse for failure. Both are wrong; "too much" or "too little" do not enter into

the argument when the application of screw is considered rightly—one might as well talk about striking a ball “too much” or “too little” in its centre. What really matters is correct strength and accurate ball-to-ball contact; the amount of screw on the cue ball is only the deciding factor when that ball has an inordinate distance to travel after contact with the object ball; and even then it must be remembered that such very pronounced screw is not imparted by shifting the point of cue contact, but by that cue-power which in its most notable demonstrations is undoubtedly a gift.

It follows, therefore, that the pupil should avoid the error of attempting to vary his screw shots by changing his cue contacts. He must learn to divide the object ball exactly as he did for his plain-ball strokes and note the effect produced by every variety of contact. If he is observant, he will soon note that screw has a most marked effect on every angle thrown after contact, that the effect is

naturally greatest when the ball-to-ball contact is full, that it is decidedly pronounced when the contact is "thick," that it is indeed considerable when the contact is half-ball, that it is appreciable in contacts finer than half-ball, and that it is far from negligible when quite fine strokes are played. Ignorance of this all-pervading influence of the effect of screw causes much trouble to some who "can screw a ball back a yard," as the marker sayeth. These players know just what they can do when it is necessary to bring the cue ball back in a line more or less direct, but are more often wrong than right when other screw strokes have to be scored. As a rule, they play too "full" on the object ball, miss their stroke, and then say they had "too much screw" on. Another most important point to be borne in mind regarding screw is that it speedily evaporates, and that its effect, especially when slow strokes have to be played, can only be depended on at a surprisingly short range. The exact range varies with

individual cue-power ; the amount of nap on the cloth also has considerable effect ; and as even the quantity of moisture in the atmosphere tells on the effective range of slow screw strokes, it will be seen that whenever a player is in doubt he had better decide against the “slow screw,” whatever else he may attempt. The point is that the backward rotation wears off long before the ball comes to a stop, and if it has gone when ball-to-ball contact is established, then no screw effect can be produced. Obviously, it is far from easy to judge whether this backward spin will be sufficiently pronounced to produce a desired effect when the cue ball has travelled a certain distance, and for this reason, beautiful and effective as the “slow screw” is, it is most essential to recognize and allow for its limitations.

“Drag” is so closely allied to “screw,” as regards cuemanship, that it is rather difficult to say where “drag” begins and “screw” departs. No doubt the cue ball is struck lower when pure “screw” is

aimed at, and the characteristic check in cue delivery is not so much in evidence when "drag" is the objective. Consequently, a modification results, and a ball carrying "drag" glides over the cloth immediately after cue contact with but very little rotary movement of any kind. There is not enough "screw" on the ball to set up a decided backward rotation, but there is enough of a species of screw effect in evidence to check not only forward rotation, but also the immediate effect of side, of which more anon. This peculiar power of "drag" has excited a good deal of theoretical discussion, but the practical points are that it enables important results to be achieved which are unobtainable by any other means. To begin with, "drag" tends to neutralize any slight irregularities on the cloth or imperfections in the balls—things which have to be allowed for, even under the best of conditions, when playing with ivory balls and attempting to bring off strokes at long range to positional perfection. In

addition, "drag" possesses what may be called a "containing" power. Struck low, a ball loaded with "drag" slips away like a pebble gliding over ice, and when the "drag" dies out, the ball begins to rotate, more often than not in two directions at the same time, and reaches its destination with just the amount of side and strength required to produce the desired effect. It is very wonderful to watch the effect of "drag" in the hands of a master—to see the ball struck quite freely, start like a dead thing, take a fresh lease of life when the "drag" has departed, and accomplish its mission with exquisite nicety. In practical billiards "drag" is almost exclusively a positional factor—it enables strokes to be played quite slowly at long range with the certainty of achieving both the score and position. Our leading cue-men use "drag" to a far greater extent than ordinary players ever attempt, and although a man, especially a free hazard striker, may make quite respectable breaks at intervals without ever putting an atom

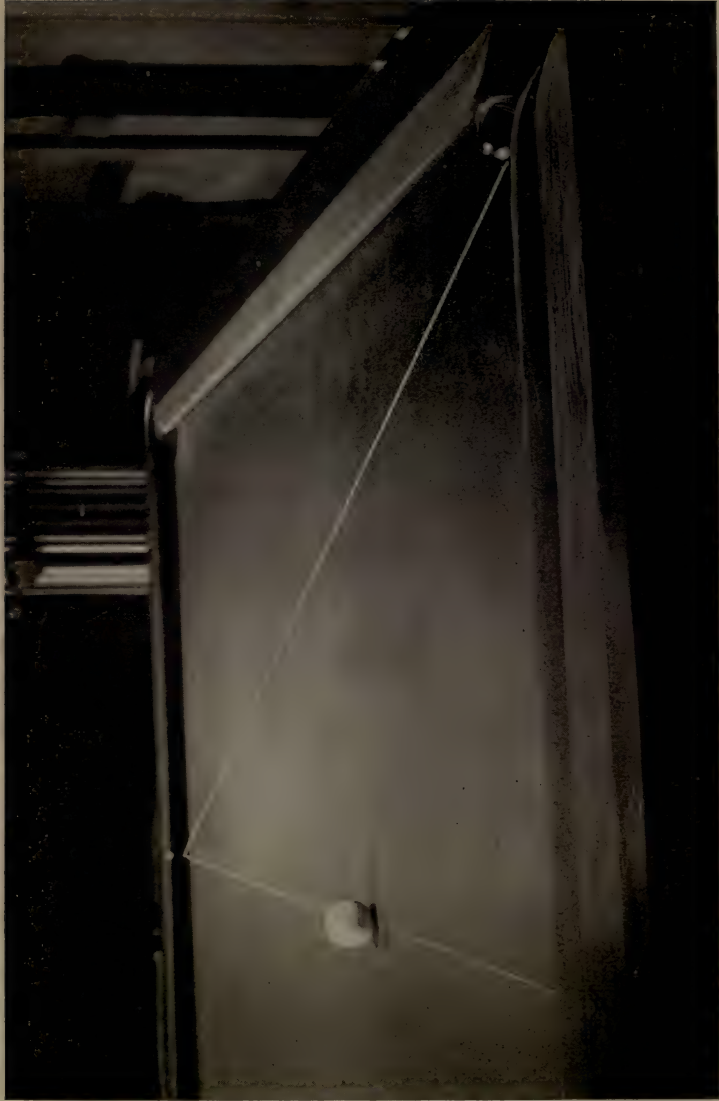
of "drag" on the ball, yet those who aspire to be really proficient must have a fair command of the invaluable assistance "drag" alone can render to the billiardist.

Side now demands attention, and the first thing to be said about it must take the form of a warning. More billiard players than enough have been spoilt in the making simply on account of an undue preference for "side effects." It seems so very clever, such a feat of cuemanship, to impart so much side that the ball seems drawn into the pocket as irresistibly as a needle is attracted by a magnet. It may well be that on occasion cuemanship of the highest order is thus evidenced, but for every half-dozen points scored by such "outward and visible" signs of supreme cuemanship, it is safe to assert that accurate plain-ball striking adds dozens of points to the score. It follow, therefore, that side is merely an auxiliary aid, something to be called upon when a problem is presented which cannot be solved without it; and not by any means a universal

scoring agent. There is scarcely any point connected with billiards which needs greater emphasis than the truth regarding the limitations of side. The tyro is so apt to look upon side as a species of magical influence which has to be brought to bear on every stroke. "Tell me, what side do I want for this stroke?" is the question the average beginner will ask nine times out of ten, and he is astonished to learn that side is the exception, the plain-ball stroke the rule.

Really, the question the player should ask himself is not "what side" to use, but whether the stroke can be made satisfactorily and certainly without the use of any side. More often than not, if the player has a useful working knowledge of plain-ball strokes, he will understand that side is not called for, and will score with accurate ease where a "bit of side" would have spoilt the shot. The gist of the matter is that plain-ball contacts are known quantities, but the moment side is introduced a variable and potent factor has to be

allowed for, and it is the best of billiards to steer clear of this complication whenever possible. Nevertheless, side is so indispensable when its use is necessary and justifiable that a sound knowledge of it forms no mean part of the art of the complete cueman. Those who have acquired a good cue delivery will experience no difficulty in the execution demanded by the practical application of side, and those who lack a good cue delivery had far better leave side alone and spend their time in improving the indispensable elements of cuemanship. No special knack or "twist" in cue delivery is called for when a stroke is played with side; the cue is delivered neatly and crisply with the usual straight swing, and must follow through the ball with a smooth, flowing action or the requisite rotary movement in a lateral direction cannot result. It is preferable to commence experimenting with side with but one ball on the table. Play along the baulk line, and by striking the cue ball away from its vertical centre



A TEST OF "SIDE"

attempt to impart enough side to pocket the red ball lying in the jaws of the bottom pocket as shown in our photo. A very few attempts will show that in order to impart the maximum of side it is necessary to strike the ball on a line running through its horizontal centre, as the further the cue-tip is brought to bear above or below this line the smaller the strikeable surface of the cue ball becomes. In practice, however, it will be found that striking the ball rather low is often an advantage; it may be because the slight screw effect produced tends to increase the effect of side after ball-to-ball contact, or it may be that a little drag is imparted, thus rendering the side inoperative to an extent immediately after cue contact and enabling it to bring its full power to bear at the point of ball-to-ball contact. But, whatever the reason, there can be no doubt that in actual play it is essential to strike the cue ball rather low when striving for everything side can give, and yet the point is such a fine one that the cue contact must not be low

enough to set up a decided screw effect. The crux of the matter is that a very little means a great deal in billiards, a point which is well illustrated by the slight cue contact beneath the horizontal centre of the ball permissible when side is called into requisition. It is quite a good idea to continue practising the stroke along the baulk line until the ball returns at a point on the bottom cushion which marks the limit of side a player has at his command. This test is very instructive, and should be persevered with from both sides of the table until a player is familiar with everything he has to do to produce the maximum side effect his cuemanship can give, and during this practice it will be quite easy for him to note the effect produced by varying amounts of side.

CHAPTER X

BREAK-BUILDING

GENERAL cuemanship and stroke play are but steps towards the making of breaks, and there is one class of stroke we have yet to describe. This is the masse stroke, which may well be considered with its first cousin, the pique stroke. These strokes provide some of the most beautiful effects in the game of billiards—effects, however, seldom called for unless a first-class professional exponent gets into trouble when exploiting the close game at the top of the table. Very likely the three balls will run a dead cover, and, to make matters worse, they nestle against the cushion, almost touching each other. Then the professor raises the butt of his cue until it is almost perpendicular, raises himself, adjusts his body pose with great care, makes a special bridge which only

allows the finger-tips to rest on the cloth, and then with a deft, downward drop of the cue on top of the ball sends the sphere flicking round in a short curve which just makes the cannon. It is very pretty, but it is no stroke to analyse in cold print. Those who wish to master it must take lessons from an expert. Fortunately, however, the stroke is as rare as it is charming—in English billiards, that is. In the Continental cannon game strokes of the masse type are frequent and necessary, but the stroke is decidedly exceptional in our game even during the compilation of the largest breaks.

Breaks should not consist of a collection of ordinary strokes varied by the frequent interposition of spectacular efforts. The ideal break runs as smoothly as a belt through a maxim gun, and scores points as accurately as the gun spits bullets. There is nothing esoteric as regards the correct principle of break-building; it is, as a great player once remarked to the writer, “merely a matter of scoring one

easy stroke in such a manner that another of the same kind is left." True, but not very helpful except as a piece of excellent general advice. It will, however, serve to emphasize the billiard truism that, bar the two-ball game, breaks cannot be made exactly in accordance with a fixed pattern. Place the balls in an open and favourable position, allow the three best all-round players in the country to make breaks from that position, and it is long odds that before twenty points are scored each player will have worked the balls into a different position. But in each case the position will be good, assuming that the player does himself justice in his own particular style. This result is due to the fact that from any one of a multitude of useful openings it is often possible to play one of several strokes which are all good in their way, and individual preference is then the determining factor. Sometimes, of course, there is only one stroke which can be called "the game"; and it may be possible as an abstract proposition in

pure theory to argue that from every given position one stroke, and that stroke only, is entitled to preference, and should therefore be played. But the practical cueman is not to be helped by such theorizing; he has done well enough if he scores and retains feasible after position; the fact that another position might be nearer the absolute ideal need not worry him.

Rightly considered, a break at billiards is a series of approximations as regards positional control of the balls, the only exception being evidenced by mechanical accuracy at one particular stroke, or series of strokes of a similar kind. The spot stroke is the classic example of break-making considered as a mechanical operation; the red-ball game is a good second, and unrestricted runs of ball-to-ball cannons may be placed third. It is safe to assert that these three methods of break-making are not to be exploited to the full by amateurs, but it by no means follows that they are to be ignored on this account.

PRACTISING SPOT STROKE 159

Far from it ; the spot stroke may be barred, but for all that it affords winning hazard practice of the very best coupled with invaluable lessons on the positional control of the cue ball. The man who practises the spot stroke until he can make six or eight consecutive spot hazards with commendable frequency will soon find his winning-hazard striking a strong feature of his all-round game. A few quiet hours of steady practice on the spot will teach him that the winning hazard demands the maximum of accuracy in billiards. There is only one spot on the red ball which can be struck to send it into the pocket, and without dallying with the "transmitted side" controversy, it is undeniable that no side can be transmitted to the red ball to help it into the pocket. In addition, practising the spot stroke gives confidence when an attempt is made to collect a few points at the top of the table.

The red-ball game, played to such perfection by George Gray, is no game

for the amateur, if a "Graysonian" standard of scoring power is aimed at. But it is, nevertheless, highly important that the amateur should practise sequences of losing hazards off the profitable red ball—he cannot do better than make them the backbone of his game; but he must recognize his limitations by allowing for a return to the three-ball game when his small stock of mechanical accuracy leaves the red ball where Gray himself would have no particular use for it. Some amateurs, a very few, have proved themselves such true disciples of Gray that it may be said that two-ball billiards pays them better than anything else the game affords. Such players will often make useful breaks off the red ball, and have been known to reach and pass three figures under match conditions without bringing the white ball into play. Amateurs who can do this are rare indeed, but when found they take a tremendous amount of beating. Yet it is a question whether their example is worth following, as we do

not know what their scoring ability might have been if they had concentrated on the all-round game the attention and practice they must have given to the "all red route." Opinions are sure to differ on this point, but there can be no two opinions regarding the attractiveness of the rival scoring methods, both to the player and spectators. After all, the ordinary individual plays billiards for sport and recreation, and while he does not mind working hard to gain reasonable proficiency, yet it is rather too much to ask him to make himself a billiard drudge at one particular class of stroke, especially as he can attain a highly meritorious degree of all-round ability without undergoing a process so tedious and trying that the average man would shirk it unless he hoped to live by it some day.

The close cannon game need not detain us very long. To the vast army of amateurs it is a sealed book, and must ever remain so. Place the balls ever so favourably for a series of nursery cannons

and many men would never be able to make a respectable show if they practised all their lives. This is because their touch is too coarse, the open game is their *forte*, close cannons can never be worth their while. But there are plenty of players who do not suffer from this natural handicap, and when the balls run well for close cannons they may help themselves to a few of these charming strokes. Turning from "set" methods of break-making to more open and all-round scoring tactics, we find ourselves back again to the series of approximations which go to the making of a break at billiards. It is easy to illustrate this point. Suppose the cue ball is in hand, the white a few inches from the billiard spot, and the red a foot from the right-hand middle pocket and in line with the centre of the opposite middle pocket, it is quite good billiards to play a losing hazard in such a manner that the next stroke is another of the same type, yet a very great player indeed might elect to leave a drop cannon from hand to follow with the idea of leading up to the top-of-

the-table game. A slight variation would leave a red winner into the middle pocket, thus affording a sure approach shot to "the top," and it would not be altogether rank heresy to cut the red in to begin with and thus arrive at the head of the table in a single stroke—William Mitchell was very partial to such a tempting winning hazard. Other leaves could be mentioned of secondary positional value, but feasible enough to go on with, in which category a losing hazard into either of the top pockets may be included, provided the stroke can be played without risk of disturbing the white ball. Thus it will be seen that yards of table space are available for positional purposes, and the golden rule is to select that stroke which permits the largest margin of error without loss of position.

The actual score is so simple that it may almost be left to itself, although in this connexion it is worth while to remember that the man who wins at billiards is the man who never misses an easy stroke; in billiards "mak' siccar" is an excellent

motto. Taking this for granted, the point to bear in mind is that judgment of correct strength is the amateur's greatest difficulty. Long practice, natural aptitude, the resilience of the cushions, the speed of the cloth, and even the individual characteristics of sets of ivory balls, all enter into the argument when strength is considered. Brought to perfection, strength is such a wondrously delicate thing that a first-class player whose living depends on the game would never think of lifting any appreciable weight lest his touch might be detrimentally affected. Amateurs cannot cultivate such a refinement of strength and touch, but they can and must be able to control the run of the balls to a reasonable extent as regards strength, or they will never make a break as long as they live.

It is not difficult to attain such mastery of strength that breaks of gratifying size may be expected, always provided that strength is allied to judgment and the requisite knowledge of the game. For instance, the simple ball-to-ball cannon

shown in our photo is a stroke the veriest tyro could make with ease and certainty. But to play the stroke properly demands the knowledge that the object white must be struck rather full and brought out towards the middle of the table off the side cushion, and the cannon completed with just sufficient weight to send the red ball into favourable position over the middle pocket. If this stroke is at all well handled, good after position must follow, but it is fatal to play so hard that the red is forced beyond the middle pocket, and it is bad to chip the white so fine that it is not brought well away from the cushion. Yet it is long odds that the beginner will do everything as wrongly as can be; he will almost certainly play the cannon rather fine, thus spoiling after position for the white—ultimate after position, that is, as the next stroke will be off the red, and his badly played cannon will also bring the cue ball against the wrong side of the red, thus sending it away from the pocket, and in all probability with such force that it runs so

far up the table as to be practically safe. Judgment and touch alone can avoid this series of billiard calamities, and the stroke is one which well repays careful attention. It is quite simple to play it really well, almost as easy as it is to play it downright badly, and the same can be said of many other strokes which make all the difference between making a break and marring it.

Mention was made in the last paragraph of the necessity for playing the cannon in such a manner as to ensure good ultimate position for the object white. This brings us to a very important point connected with break-making, which is that no opportunity should be lost of leaving a ball well even if the next stroke will not be played at that ball. Indeed, it may happen that a series of strokes off the other ball, especially if it is the red, may be played before a stroke is demanded at the ball which was left in a favourable general position at the first opportunity. Such a position, except in top-of-the-table play, always means leaving the ball so



TWO POSITIONAL CANNONS (pp. 165-167)

that it can be attacked with advantage when playing from hand. An ideal leave of this type presents an easy losing hazard into a middle pocket for choice, and when thinking out the means whereby such a positional sequence can be assured, the player will find that his two-ball practice will have taught him many valuable things regarding the amount of table space available for this purpose.

Another stroke, rather more complex than our last example, shows even more plainly the difference between playing for the stroke and playing for the break. As will be seen from the illustration, the balls lie in such a position that a tempting cannon direct from white to red is offered. This, however, is not the game. The correct stroke is played off the red first, and then back off the cushion on to the second object ball. The result of the stroke is much the same as that aimed at in our previous effort, as the red should be steered over the middle pocket, and the white brought into better position more towards the centre of the table. It is a

pretty stroke, and as effective as it is pretty. No side is required on the cue ball; the desired effect is obtained by judging the angle when placing the ball to play from the "D." The stroke is sound enough, and a certainty in the hands of anyone with any pretensions to real billiard ability. Yet it would be "money for nothing" to wager that the vast majority of untutored players would dash at the direct ball-to-ball cannon without a second thought; then they wonder why the balls run badly for them and why they never improve, in spite of any amount of casual play. This stroke is a good one to work out and master most thoroughly, as slight variations of it are continually cropping up in actual play, when the temptation to make sure of the easy couple of points is apt to be too strong to be resisted, and the direct cannon is sure to be played unless the proper method of handling the stroke has become almost second nature.

Our next example provides a run-through losing hazard off the red ball



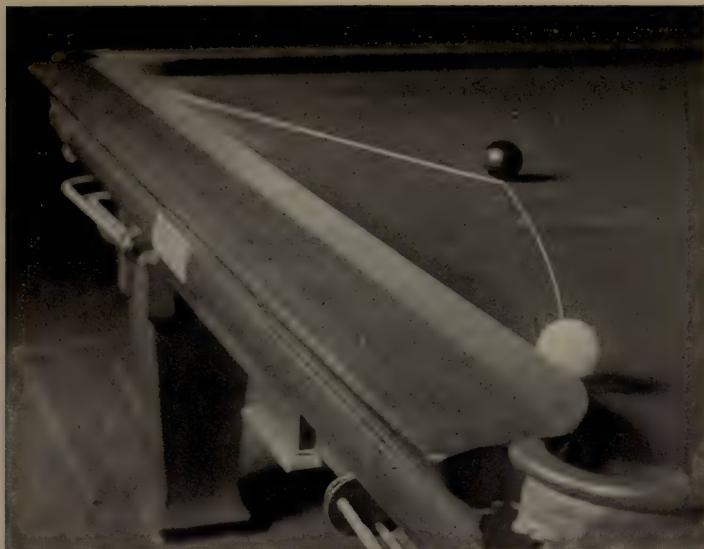
A RUN-THROUGH LOSER OFF THE RED LEAVING POSITION FOR
THE CANNON

played in such a manner that the object ball stops somewhere near the point indicated by the termination of the dotted line, thus leaving an easy and profitable cannon from hand to follow. The stroke is simple enough, yet beginners will miss it, and others like it, because they will not hit the object ball thickly enough, thus achieving a kiss instead of the desired run-through effect. A little left-hand side is desirable to help the ball into the pocket, but the main thing is the proper ball - to - ball contact added to a free, swinging cue delivery. As a matter of fact, the ball is so close to the pocket that the stroke could be made without any side at all, and made every time in this way by a man whose cuemanship was good and who understood where to hit the red ball. But the actual score is only part of the proposition; the player should practise away until the desired after position is attained, then he may practise a "drag" effect when manipulating the cannon from hand.

CHAPTER XI

SWERVE EFFECTS

THE swerve of the cue ball before contact with the first object ball was referred to in Chapter V, where the stroke now shown in our photo is referred to as an "awful example," as a warning against the ignorant and indiscriminate employment of side and unjustifiable variations in cue delivery. Now, however, the stroke is brought forward as an example of the positional effects obtainable by this preliminary swerve of the cue ball, a matter of very great importance in break-making. The stroke now before us, if played as a forcer, is extremely difficult as regards execution, and quite uncertain as regards after position of the red ball. Played properly, by elevating the cue-butt and imparting the necessary side, thus ensuring a swerving path for the cue ball, the stroke leaves the



A "SWERVER" (p. 170)

A VERY PRETTY CANNON AT THE TOP OF THE TABLE (p. 178)

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red ball in good position over the middle pocket. Clean, crisp cuemanship is the main requisite; the cue should be swung so nicely that it seems to drop on the ball; the weight of the cue is quite sufficient to make the stroke.

This divergence of the cue ball from a straight line always occurs before ball-to-ball contact when the cue ball has to travel a fair distance up or down the table at a slow pace and carrying a maximum of side. A refinement of positional play turns this fact to advantage by deliberately playing for the slight swerve, and allowing for it. Suppose, for example, that the object ball is nearly tight against the top cushion, and so close to the corner pocket that almost any thinnish contact on the pocket side of the object ball will make the losing hazard. The danger is a kiss, caused by a too full contact, and assuming that the stroke has to be played from hand, this risk is by no means inconsiderable if a plain-ball stroke is attempted at all slowly. Played smartly, position is

problematical; the right stroke just clips the object ball, clears it away from the cushion, and leaves it at a most convenient angle a few inches from the pocket. This result can be achieved every time by playing slowly with drag and strong pocket side. The drag keeps the cue ball straight at the commencement of its run, but as it dies away the ball begins to turn under the influence of the powerful side, and ultimately makes the desired contact with the object ball, the strong side making the hazard the more certain. But aim is taken full at the middle of the ball, not at the point it is desired to hit; the drift of the cue ball finds the target. Against the nap of the cloth, of course, the action of the slow side is reversed, and in any case a losing hazard of the type now under discussion would seldom or never be played up the table, as it is obvious that in nearly every case the immediate and imperative object would be to bring the ball played at out of baulk, thus demanding such a speedy run of the cue ball that side would

not divert it, assuming that the cue action was normal. Very beautiful positional problems are unfolded by a close study of the preliminary swerve of the cue ball; and it is both pleasant and profitable to tackle the subject on the board of green cloth. Cue in hand, the student can make many interesting discoveries by experimenting with a view of ascertaining the amount of divergence to be expected from a slowly moving side-laden ball. Perhaps his most important discoveries, especially if he is a cueman who has toyed with the game for years, will lie in the direction of showing him why failure is so frequent when he attempts certain strokes. Take a particular "long jenny," for example, that nasty one which is offered when the object ball is a foot or more above the middle pocket and dangerously close to the cushion. Played as it should be, this stroke sends the cue ball spinning into the pocket, very possibly after a bump or two on the side cushion, and cuts the object ball out towards the centre of the table

well within the scoring zone. By far the most common cause of failure is a kiss, caused by a thickish contact preventing the object ball from clearing away in time. To obviate this, aim should be taken to hit the object ball at its extreme edge—almost to miss it, in fact—when the cue ball, almost humming with side, will drift over during its run and make the correct ball-to-ball contact.

Mention of the “jenny” brings to mind a potent effect of side after ball-to-ball contact. This is the power it possesses of enlarging the pocket, so to speak. A ball carrying an abundance of side is sure to drop if it strikes the pocket jaw, or even if, as we saw with reference to the “jenny,” it strikes the cushion some distance from the pocket. The speed of the stroke makes a great difference, as the permissible margin of error is but small, almost negligible, when the ball is moving fast. Needless to say, “pocket” side must always be employed—that is, the ball must always be struck so that the

direction of its spin turns towards the pocket after ball-to-ball contact has been established. "Reverse" side is the direct opposite of this, and tends to keep a ball out of the pocket. The great point to be remembered is the direction of the twist after contact; for example, place the red ball a couple of feet from the top pocket and two inches from the right side cushion. Put the cue ball eight or nine inches from the red, and so far up the table that it is an inch nearer the top cushion than the red ball is. Try for the losing hazard into the top pocket, no "every-day" stroke for most amateurs, and at first sight it might be concluded that left-hand side is required to pull the ball into the pocket. But this is not so; right-hand side, to say nothing of screw, is correct. The reason is at once apparent when the inevitable course of the cue ball towards the pocket is examined; this is practically parallel with the side cushion, and consequently right side alone can help it into the pocket.

Therefore, it is not difficult to decide which side is required to "make the pocket easy"; the trouble is to settle how much side is required, what force is necessary, and whether the side is to be utilized in conjunction with screw or "top." Here we are faced by possibilities and complexities as endless and diverse as moves at chess, and subject to a personal factor as regards execution which does not affect the chess player. Cue-power counts for much in this phase of billiards, and as this power, indisputably inherent in its most perfect form, varies greatly in individuals, it is safe to assert that every player must work out his own detailed schemes as regards the application of side, either alone, or in conjunction with other properties. General principles can be laid down in print, but that is about the limit. What the professor terms "plenty" of "side," "top," or "screw," as the case may be, is in all human probability something beyond the cue-power, natural or acquirable, of the vast majority of amateurs.

It is a mistake to set them striving after the unattainable ; their task is to ascertain their limitations, and to attain perfect control of the cue-power they possess. When they have learned what they can impart to a billiard ball they have learned much. When they understand the effect of what they can do they have no more to learn. In this respect every player is very largely a law unto himself, and must, after gaining a proper knowledge of essential fundamentals, work out his own billiard salvation to a very considerable extent. For this reason no effort should be spared to squeeze the last point out of plain-ball striking. The man who can make half-ball losers with certainty all over the table, and is familiar with the effect of plain-ball contacts ranging from full to very fine at varying strength, will always be a far more effective player than the man who half understands more spectacular things, and at times brings off "big shots" which would not disgrace the most brilliant performer that ever handled a cue. The

necessity for this simplicity cannot be insisted upon too often or too strongly, as plain-ball striking is within the grasp of all, provides effects which are consistently reliable and constant, and makes no call upon that cue-power which is so largely a natural gift.

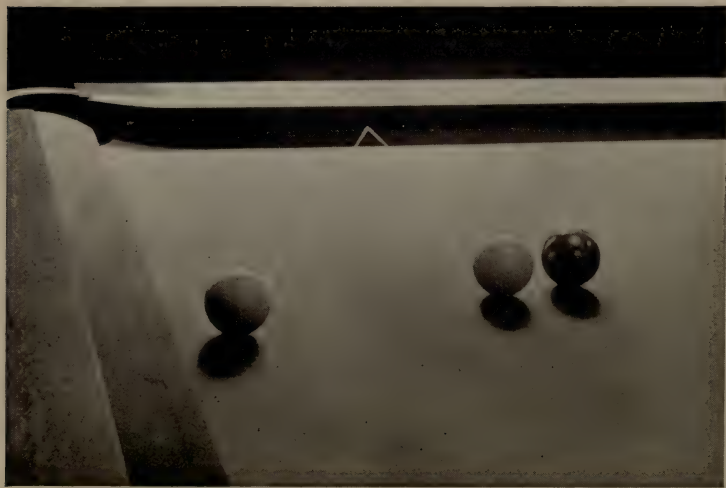
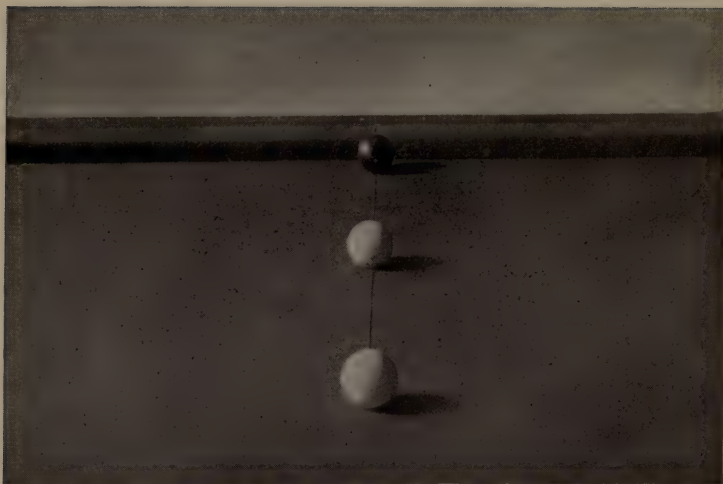
There are, however, plenty of occasions when plain-ball striking cannot cope with the situation, and other means have to be utilized to gain the desired end. A case in point is illustrated in our photo of a very pretty cannon at the top of the table. The direct ball-to-ball cannon is not on—the balls are too nearly covered for that—so the cannon is made by playing rather fine off the white with a good deal of left-hand side, which brings the ball back off the side cushion, as shown by the continuous line in the photo. This stroke is decidedly useful, and if well handled should leave the balls nicely placed for a break. On this account it is a good stroke to master—it is one of those strokes which get a player out of trouble,

and enables him to go on his way rejoicing, in spite of an adverse grouping of the balls. Such strokes, to whatever class they may belong, are the cement which joins a break together for most of us, as few amateurs can hope to arrive at that exquisite positional control of the balls which seldom leaves a difficult stroke. The stroke will also serve as an additional illustration of the effect of side after a ball laden with it strikes a cushion.

In billiard-room parlance the effect of side after contact with a cushion is known as “running” side or “check” side. The difference is this: “running” side is always imparted by striking the ball on that side which will help it away from the cushion; “check” is the reverse. Thus, all “long jennies” are played with strong “check” side, hence the hugging of the cushion by the cue ball. The other side, “running” side, compels the ball to dart away from the cushion like a thing of life, and is so pronounced in its effect that a slowly moving cue ball carrying a lot of

“running” side will leave a cushion with increased velocity after contact, a circumstance which is thoroughly understood and appreciated by the professors who with but little effort make a ball glint round the table like a ray of light.

As the tendency of the balls to “cover” in such a manner that a direct ball-to-ball cannon is not playable by means of a “run through” is a common and disconcerting occurrence, we have photographed a variety of these strokes just to prove that they are not so hopeless as they often appear. The first example is a very simple one. The balls lie in a straight line, the red tight against a cushion. It is only necessary to strike the object white approximately in its centre, not too hard and with a shade of follow on the cue ball, and the stroke is completed—the cannon is a certainty every time if handled in this way; after position is ensured by handling the stroke with judgment as regards strength. Our next specimen is even more simple, and the



TWO SIMPLE CANNONS (pp. 180-181)

method of making the cannon by gauging the angle off the cushion is so well shown in the photo that further description is needless. It is, however, well worth while to note that the point on the cushion indicates the spot where the centre of the cue ball would impinge. This is always the case, but the cushion comes into contact with the middle of the outside edge of the ball, and due allowance must be made for this, especially when the contact is oblique to a greater extent than is evidenced by the stroke now before us. When this is the case there is often a sadly mistaken tendency to ignore at least half the width of the ball by aiming straight through the centre of the ball at the desired point of impact on the cushion ; the consequence is that the cushion is struck too soon and the stroke spoiled. Incidentally this fault accounts for a shocking waste of points at the ever popular " snooker."

CHAPTER XII

KISS STROKES

WHEN the balls run badly, which is a habit they have even with the best of players on occasion, a habit which at times seems almost human in its sheer cussedness, it is a great advantage to know how to handle strokes of the type dealt with in this chapter—"A chapter on kisses" we might have called it but for the undue encouragement such a title would afford to the amoristic artists who specialize in depicting, often with charming results, osculatory variations of billiard-room terms. For the sake of convenience we may divide kiss strokes into two categories—the first when a kiss is caused by contact with a ball tight against a cushion, the second when the first object ball is played on in such a manner as to direct the second object ball in any desired

direction in order to enable a cannon to be completed by a subsequent "kiss" contact between the cue ball and the second object ball. The first variety are sometimes called ricochet shots, and the main thing to be noted is that all normal angles are destroyed by these strokes. What happens is that before the cue ball has time to get away it is kissed in a fresh direction by the greater resistance offered by a ball jammed tight against a cushion. Sometimes, when playing "run-through" strokes at an object ball tight against a cushion, this increased resistance, the "kiss" effect, must be avoided or the stroke is quite spoiled; the object ball must be cleared out of the way before the cue ball starts on its desired path. This is quite easy if the balls are nearly in line, although often bungled by beginners who will not hit the object ball thickly enough, and consequently find the cue ball kissed away with disappointing frequency. The difficulty of this class of stroke increases with great rapidity as the cue ball

is moved more and more out of line with the object ball, and it becomes quite impossible long before anything approaching the angle presented by the strokes we are about to demonstrate is reached.

The first of these is a very simple yet highly instructive stroke. It is a kiss cannon from white to red, and the beauty of the stroke lies in the transformation it effects from a bad position to a good one. As the balls lie, the prospect of a break does not appear at all promising, but if this cannon is well handled it will bring the object white well into the mid-table scoring zone, and leave the red nicely placed over the middle pocket for the next stroke. Try it—strike the cue ball just a trifle above its centre and with a crisp little stroke make a thickish contact with the white. Be sure you hit the ball thick enough—this stroke is easily missed through too fine a ball-to-ball contact. After position must always be attained ; it is inexcusable merely to make this cannon and leave the balls anywhere. Our next

POSITIONAL KISS CANNON 185

stroke is rather more tricky. It is a cannon from red to white, both object balls touching the cushion and nine or ten inches apart. A beginner could make the cannon time after time after a few trial shots to instruct him as regards strength and ball-to-ball contact. But, almost invariably, he would cannon full and rather slowly on to the white, thus leaving the cue ball in line with and between the two objects, and nothing much on except a screw-back cannon of uncertain positional value, and, very possibly, uncertain in execution as well, as the balls may easily run so close that the screw-back calls for no mean cue-power. If, in addition, the angle is difficult, the screw-back cannon becomes a real teaser.

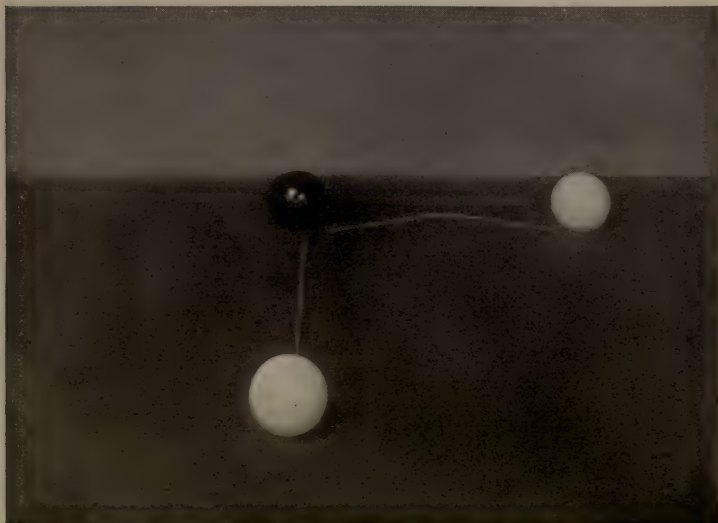
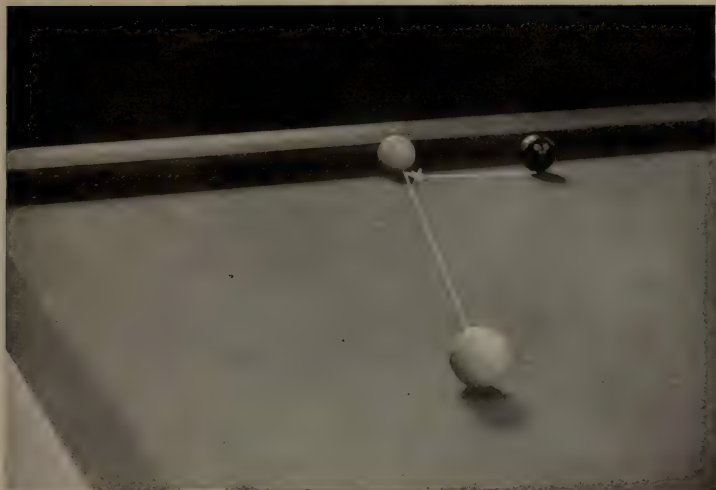
All this can be avoided by playing the cannon in the manner shown in our photograph, but imparting a little right-hand side to the cue ball, and gauging the contact with the red so that the cue ball impinges on the cushion at a point practically equidistant between the two

object balls. Then it will just clip the white as the cannon is made, and run on for a few inches, thus leaving a plain ball-to-ball cannon from white to red to go on with, a stroke favourable enough for the continuance of a break anywhere, but especially valuable if the balls lie along the top cushion and are open for the top-of-the-table game. Mention of the top-of-the-table game brings to mind one of the most delightful phases of billiards; it is the poetry of the game, and epic poetry at that. In the hands of a master it is a prolific and pleasant means of adding a rich harvest of points to the score with but little apparent trouble. It seems almost absurdly simple: pot the red, cannon, pot the red, cannon, perhaps another cannon, then down goes the red again. Sometimes two red winners are made in succession, and it often happens that a run of close cannons will send the score ticking along at a merry pace. Apparently, to the uninitiated, it is billiards for beginners all the way, but in reality it is

so difficult that it is open to doubt whether a dozen men have mastered it in the whole history of the game. More often than not it demands positional control of the balls to an inch, and there are plenty of positions where a sixteenth of an inch means all the difference "at the top." Winning-hazard striking of the highest quality is an absolute necessity. The top-of-the-table exponent must be able to pocket the red every time at all sorts of angles, and, what is infinitely more difficult, he must be able to put the red in and at the same time impart to the cue ball whatever side, screw, or "top," or combination of side with either screw or "top," the exigencies of position may demand. This is a terrific task, nothing short of a life study when it is considered in conjunction with the exquisite touch and the complete knowledge of angles which are also constantly in request. Altogether, it is safe to say that the top-of-the-table game is not the type of billiards it pays an amateur to specialize in.

He may exploit its most obvious strokes, such as cannons played to leave the red in the vicinity of a top pocket, but when this is accomplished the amateur would be well advised to take the quickest route back to the open game. It may be a red winning hazard played to leave the familiar natural angle loser off the spotted red, or it may be a nicely judged loser manipulated well enough to leave an easy stroke from hand. Either of these will keep the amateur in his element, will offer him strokes he can play to advantage. But if he is obsessed with the top-of-the-table idea it is a hundred to one that before he has scored a dozen points "at the top" the balls will run a dead cover, or he will leave the red in the jaws of the pocket for the benefit of his adversary.

If, however, a man has a strong natural inclination for this close work at the top of the table, he may rest assured that he cannot hope to make real progress at the spot end without a table of his own to practise on, or at the very least undisturbed



TWO USEFUL KISS CANNONS (pp. 184-185)

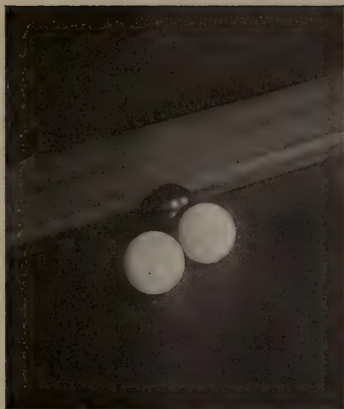
possession of a first-class table and balls for hours on end, day in and day out. He will also require the best of professional advice and tuition, and more than a little of it. If he has all these requisites at his disposal, and is blessed with plenty of patience and perseverance, he can revel in the top-of-the-table game to his heart's content, and may hope, in time, to acquire profitable proficiency. That's the rub : is the degree of proficiency absolutely essential to make the top-of-the-table game worth while? Partial proficiency is a delusion and a snare, and tremendously expensive into the bargain, as it so often means missing a score by the merest shade and leaving the red exactly where the "other man" is delighted to see it. Many capable amateur cuemen have lost games out of number in this way through dabbling with the spot end game, taking undue risks in the effort to retain it, and thereby letting their opponent in for a good break. The losing hazrad, the backbone of the

amateur's game, is completely eliminated from top-of-the-table billiards, and in place of it there is a continual striving after positional control of amazing accuracy, often so scientific and involved that a whole series of strokes is played to lead up to a desired position, and it is a mere commonplace to plan two strokes with the fixed intention of leaving position for a third which is mapped out beforehand to a fractional part of an inch.

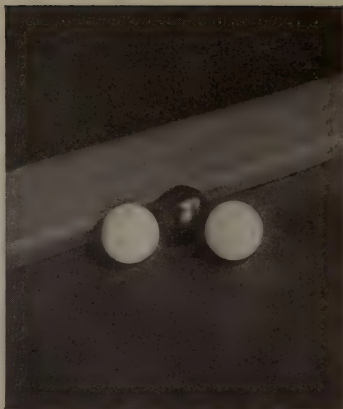
One phase of the top-of-the-table game will serve to illustrate its difficulties, and as a similar grouping of the balls may occur elsewhere, the position is worth more than passing notice. It is an ideal position for the close cannon game, for a sequence of those nursery cannons which the professors rattle off with such exasperating ease. These strokes have already been mentioned, and their peculiar difficulties insisted upon. Here is a selection of seven, photographed from actual play, thus showing the position of the balls with the utmost nicety. The first stroke is a

perfectly plain ball-to-ball cannon, played fine, and with just sufficient strength to leave the cue ball behind the red as shown. A fair swing of the cue makes this stroke; it cannot be done by trying to gain extreme slowness by a spiritless cue action; but the requisite delicacy of cueing required for these strokes is justly comparable to the transcendent touch of a great violinist. Unless this touch is present, and it is almost entirely a gift, it would be sound tactics, but not pretty billiards, to play the second cannon with enough freedom to drive the red ball right along the top cushion towards the corner pocket, making the stroke with a slight "stab," or semi-screw effect, to avoid the semblance of a push. To continue the sequence of nurseries, however, the cannon must be made by means of an indescribably fine contact with the red, thus sending the cue ball on to the cushion loaded with just enough right-hand side to bring it back at an angle gauged to such a minute fraction of an inch that the white ball is

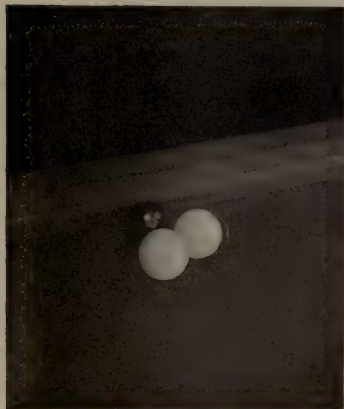
merely grazed in passing, barely moved in fact, while the red ball is sent far enough along the cushion to set up the position shown in our third photo. This bears a strong resemblance to the first cannon, and is played in a similar manner, thus leaving the balls as shown in No. 4, when No. 2 stroke is repeated, thus leaving No. 5. This was played with more freedom, and the second object ball was left a trifle too far from the cushion—perfect nursery cannon play keeps that ball progressing in a straight line—which is the great secret of the scoring principle. The sixth cannon was played with a slight kiss effect off the red, with a result which might have been improved upon, as the next stroke demands the engineering of a kiss between the white and the red, which will bring the latter ball into position for completing the cannon in such a way that the sequence of nurseries can be continued. Every one of these strokes seems as easy and natural as drawing breath when an accom-



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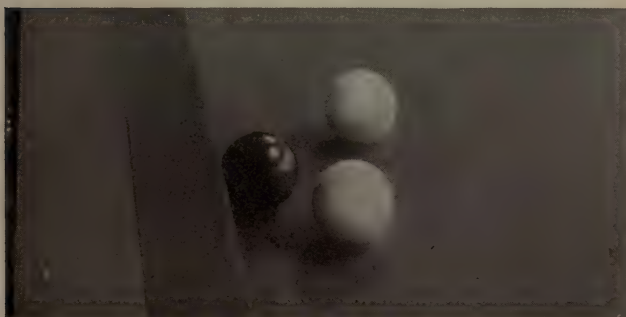


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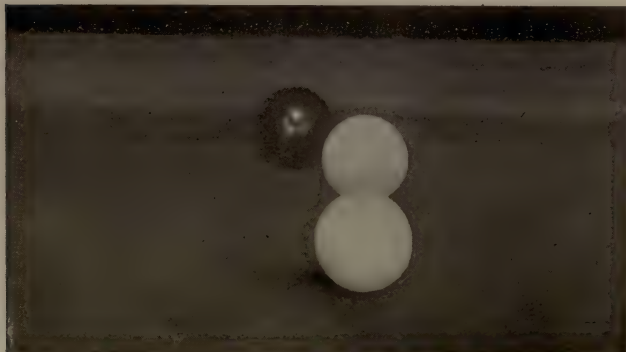
A SERIES OF SEVEN NURSERY CANNONS (p. 190)



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plished professional is behind the cue, but to the ordinary cueman they are indeed "not what they seem," as a very little practice will soon prove.

CHAPTER XIII

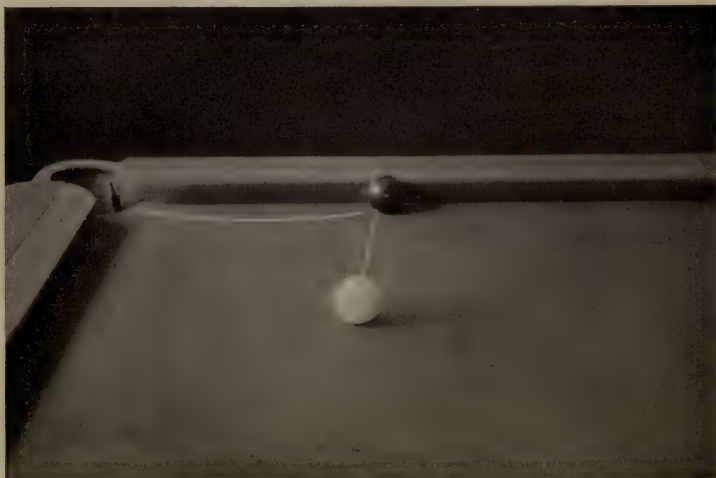
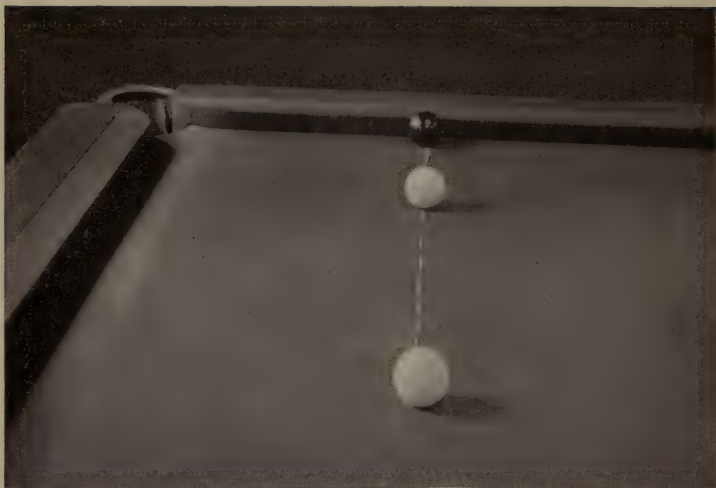
SAFETY PLAY

REVERTING to kiss strokes, we will put up a very simple one, a direct kiss back from red to white. The cue ball must be struck smartly, and driven quite full on the red, when the cannon will be completed as shown by the dotted line in the photo. It is an easy shot, but it is a very different matter when the second object ball is not in a direct line. Then the stroke can only be made by varying the contact with the first object ball, and it is most instructive to try a series of strokes of this kind. Retain the red and cue ball in the position illustrated, but shift the second object ball inch by inch to the right and left alternately and make the cannon from each new position, thus completing a series of strokes which will radiate from the red ball like spokes from the hub of a wheel,

Eventually this process will lead up to strokes which take the cue ball right along the cushion; two of these strokes, both cannons, were dealt with in our last chapter. We now pass to a losing hazard played in a similar manner, but it should be noted that the cue ball is slightly to the left of the object red, and that a little right-hand side with a cue contact higher than central facilitates the score. The curve of the cue ball after contact shows the ricochet effect, and it is very necessary to gauge this with the utmost nicety or the stroke will fail. The main thing is to gauge the ball-to-ball contact with the requisite exactitude, as the permissible margin of error is almost infinitesimal. Strength, too, demands careful attention, as the stroke is not to be made by a lusty smite. Variations of it are possible, but increase rapidly in difficulty as the cue ball is moved further to the left, and the margin of scoring possibility in this direction is soon reached. Each move of the cue ball to the left means more top and

side and greater cue-power to produce the indispensable ricochet effect which twists the ball into the pocket simply humming with side after describing a much more pronounced curve than that shown in our photo. In the other direction, to the right of the ball, the stroke is difficult indeed because each change in the angle entails a corresponding difference in ball-to-ball contact, and these differences, although all-important, are so small that it is a hard task indeed to gauge them accurately enough to make the pocket. Strength and side have also to be estimated with the utmost accuracy, and when everything is allowed for, it is safe to say that when the cue ball has a fair distance to travel losing hazards by means of a kiss off an object ball tight against a cushion are so uncertain that they should never be played if they can possibly be avoided.

Cannons are different, especially if the second object ball is slightly removed from the cushion. Then the target presented is so large that a cannon can be played



A KISS CANNON (p. 194)
A KISS LOSING HAZARD (p. 195)

with confidence where a losing hazard would be scarcely within the possibilities of the game. A stroke of this type is now depicted, and it will be seen that the white is in dangerous proximity to the corner pocket. Therefore a slow kiss is played which steers the cue ball clear of the cushion and enables it to cannon on the edge of the white nearest to the player. The contact is but slight; the cue ball comes to rest against the side cushion, thus presenting an easy white loser to continue with. Comparatively little practice will give a useful mastery of cannons of this description, but a losing hazard off a similar red-ball position is a different proposition. It is on, of course, but so inordinately difficult that most, even the best of players would look around very thoroughly for some other opening, and if nothing better was presented, they would prefer to play for safety, unless the state of the game was desperate indeed. Sometimes, oftener than is generally supposed, the familiar half-ball contact offers a certain score

when the object ball is tight against a cushion. A stroke of this type has been photographed, and it is only necessary to place the balls as shown and play a plain half-ball on the red and the cannon is as sure as any other half-ball stroke. The cue ball should be struck freely and a trifle high, and too much force must not be used. The stroke is easy enough, and very valuable because variations of it so often crop up in actual play. Such a cannon is always available when the second object ball is anywhere on the line between the two object balls, and variations of ball-to-ball contact will supply a useful range of angles, a knowledge of which will often extricate a player from the trouble caused by the first object ball running tight against a cushion.

In our last paragraph a passing reference was made to safety play, a phase of the game which merits careful consideration. The average amateur pays far too little regard to this side of billiards, and confines his potting the white and giving

of misses to the rigour of handicap games. This is a mistake, but it is so universal that it has established a tradition of its own, a tradition which scorns potting the white and leaving a double baulk as “not sporting,” and confines misses to the conventional opening misses at the beginning of a game. It is baffling in the extreme to endeavour to analyse this peculiarity of billiards, but the fact remains that men who will play any other game to win fairly and squarely according to the letter and spirit of the rules, habitually refuse to pot the white at billiards, and regard the stroke as something which needs an apology if done accidentally, or as an unpardonable billiard solecism if accomplished with set purpose in a friendly game. There is nothing whatever in the rules to justify this attitude; all the best players pocket the white when it is the game to do so; but neither the rules nor the force of example make the slightest difference to that great unwritten law of billiards which ordains that the white

ball must not be potted on purpose in a sporting game between friends who are not exactly accomplished cuemen. Good players, amateur or professional, never hesitate for a moment when it is obviously the game to make the white winning hazard, but the majority are firmly convinced that the stroke is barred in a sporting sense no matter what the cracks may do, or what the rules say about it, and it is quite the usual thing to see this absurd idea pushed to such an extreme that a man who only wants one or two points for game will go for an impossible stroke off the red rather than pot an adversary's ball which is hanging on the brink of a pocket.

There must be some reason for such consistency in wrong-doing. It may be that potting the white, unless the striker be a decided disciple of the Gray school, is regarded as a reprehensible admission of inability to continue the break, a confession of weakness the poor player considers it beneath his dignity to make ; but it is far

more likely that the double baulk, the natural sequence of the white winner, is looked upon as giving the other man no chance at all, not even a sporting chance, and is therefore “playing the game rather low down on him.” Neither of these notions invites serious argument, and the subject may be dismissed with the remark that the man who does not pocket the white when the run of the balls calls for the stroke may be playing a game of sorts which amuses him, but he is not playing billiards. On the other hand, it is a deplorable mistake to specialize overmuch in potting the white without good and sufficient cause. Such play, allied to a weakness for giving an abundance of safety misses, will not make a man popular in a billiard sense, but will tend to transform him into a species of billiard wall-flower shunned by partners who want an enjoyable game. It is not sound either, is this inordinate craving for safety. Breaks, the bigger the better, and plenty of them, win billiard matches, and where

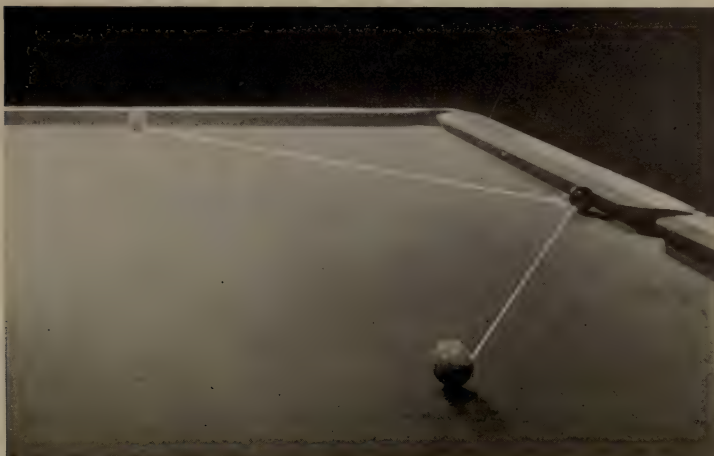
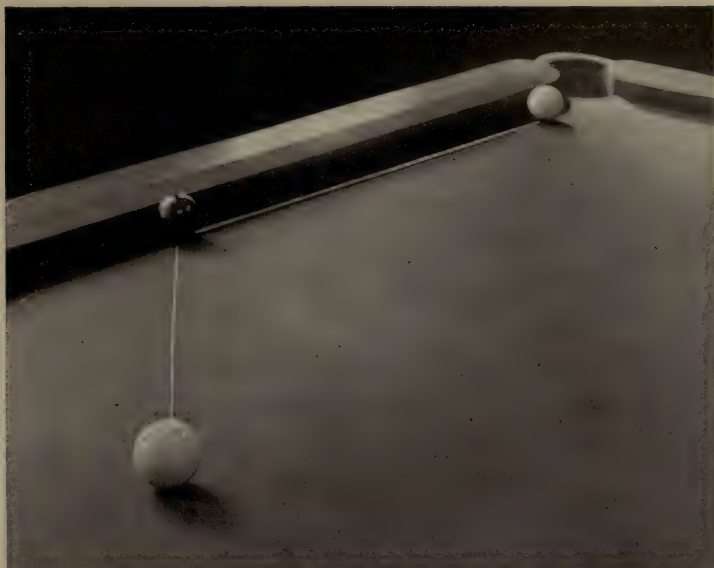
are the breaks to come from if a man cramps his game by safety play every time the balls group themselves in such a way that one has to take a sporting chance to score ?

It must also be remembered that to make a safety stroke pay it should be handled supremely well, and that safety play as a whole demands as great a knowledge of the game and, at times, as much manipulative skill as any scoring phase of billiards does. Admirable judgment is indispensable. A badly played safety stroke may leave the balls dead safe for an opponent, and equally safe for the striker when it is his turn to play. This is not clever, especially under the B.C.C. rule which limits the number of consecutive misses. A good safety stroke leaves the man who plays it at least a feasible chance of a score if the balls remain undisturbed, and at the same time presents his adversary with a billiard problem of the first magnitude. There is a refinement, a refinement subtle to the point of

danger, which essays to leave the balls in such a way that an opponent feels tempted to go out for a score which, if missed, will leave the balls well placed for a break. This method of cajoling an opening means leaving the balls so that it is odds against the score and odds in favour of the desired position when the stroke is missed. Deep play, very, so deep that it may take a man out of his depth unless he has but little to learn about billiard possibilities and probabilities. Really, a knowledge of these things is the first requisite of safety play. A man must be able to put himself in the place of his opponent when the balls have finished rolling and estimate the effect of the lie of the balls. This makes a full call on billiard skill of the highest order, and it is frequently a nice question whether such skill is more advantageously employed in closing the game up instead of endeavouring to continue the break. Many factors enter into such a problem, the state of the game, the liking of the player for a particular stroke

out of the ordinary run, and the relative value of a dashing score or a safety leave on the *moral* of an opponent, especially in a handicap game when the striker has to give a long start. All these things have to be borne in mind, weighed up, and acted upon when safety play is a contingency of immediate urgency. Last, but by no means least, safety play is largely a matter of temperament. It is a great strain to think rightly and act rightly when so much depends on the one stroke, and as this one stroke so often makes its appearance at the critical stage of a hardly fought game, it is obvious that one should be as "cool, calm, and collected" as the ideal boy scout to make the best use of safety play just when it is most necessary.

As regards actual safety strokes, it is possible enough to detail them in profusion and then miss the very one a man will want to get him out of a tight place in his next game in the club handicap. The general principle is easy enough to



A KISS CANNON (p. 197)

A HALF-BALL KISS CANNON (p. 198)

follow ; the double baulk, provided the balls are not left too near the baulk pockets, is always safety play beyond reproach. But if the double baulk is not playable, there is nothing for it except to play the best safety stroke a man can devise on the spur of the moment. This opens an endless vista of possibilities, but there is one general rule which may always be relied upon, which is that the stroke offering the largest margin of permissible error should invariably be played. It is asking for trouble by cutting things too fine when playing for safety. Play for a certain position with all the exactitude you can command, but do not try to arrange the balls to an inch if another stroke offers a foot or more of desirable safety zone, take a yard of such assistance if you can get it, and, finally, never play the cue ball straight back into baulk when giving a miss from an out-of-baulk position ; it is always preferable to gauge the stroke off one or more cushions.

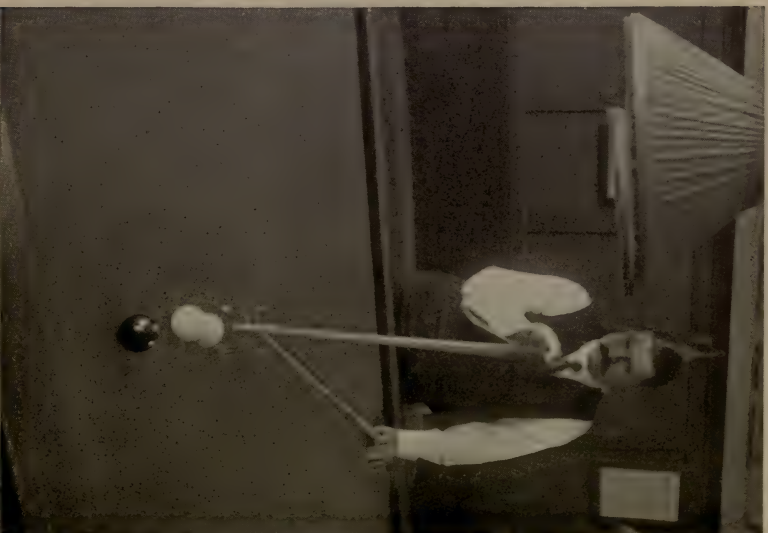
CHAPTER XIV

THE THEORY OF PROBABILITY

BAULK play is largely a matter of common sense, of that taking thought which adds so much to a man's score at billiards, and is even more useful as a means of stopping an opponent from scoring. Billiards is not a game to ponder over unduly, but for all that every stroke should have brains behind it. We have been told that billiards demands qualities akin to the hand and eye of a cricketer and the brain of a chess player, and there is much truth in this dictum, with special emphasis on the chess-playing attribute when safety play in general and baulk play in particular are the immediate objective. Then it is always advisable to pause long enough to remember that a good single baulk is much better than an indifferent double baulk, and that a really bad double baulk, a stroke



HOW TO USE THE REST CORRECTLY (p. 123)



HOW TO USE THE "SPIDER" CORRECTLY (p. 125)

which leaves the balls safe for the man who made it, is worse than useless. Such a stroke can be countered with ease by an answering miss which leaves the balls "stone safe," thus giving the man who made the bad double baulk nothing to play at. Sometimes, very often, indeed, if his adversary has a good knowledge of the game and thinks of what he is doing, the original offender will find that the answering miss leaves a feasible opening for his opponent, thereby compelling him to go right out for a next to impossible stroke and thus risk opening the game to his manifest disadvantage. It follows, therefore, that baulk play must leave the striker something, or it is best left alone, unless, of course, a man happens to want but one point for game, when almost any kind of double baulk which does not leave a ball too near one of the bottom pockets will doubtless answer the purpose.

Countering the double baulk may demand either an attempt to score or a continuance of safety tactics, and in the great majority

of cases the latter method is decidedly preferable. There are ways and means of making a cannon from almost any double baulk, but such strokes are more often missed than made even by the world's greatest cuemen, and it is almost a waste of time for the ordinary player to bother about them. But he ought to be able to do something if a ball is fairly close to either of the bottom pockets, or if the two balls are left near to each other in the same part of the table. The odds are then in favour of a score, either by judging the angle off the top cushion, or by bringing the cue ball back off the side cushion as shown in a previous stroke advocated as a means of practising side. No inordinate amount of practice is required to bring the cue ball back into either of the baulk pockets by whichever of the foregoing methods may be selected, and further practice will show how far variations can be relied upon. It follows, therefore, that when the cue ball can be directed with reasonable certainty over a limited portion

of the baulk area, a score should always be attempted when the object ball lies temptingly within that area. When this is not the case it is better to give a safety miss, and in actual play it will be found that a miss is nearly always the game.

As a safe rule of practical billiards it is best to exploit the miss when the chance of scoring off a double baulk is not worth attempting. There is something to be said in favour of an endeavour to disturb the balls when they present an easy losing hazard off the red, but this attempt to spoil position for an adversary without any definite idea of scoring is a policy of desperation which may easily defeat its own purpose. The red may be hit and sent willy-nilly over another pocket, and the white may settle down just where a loser is presented, to say nothing of the ever-present chance of a cannon position resulting from the blind shot at balls in baulk. If this sort of thing happens, all three balls are brought into the game for the benefit of the other man, whereas if

the miss had been played the white would assuredly be safe for the time being. It might well be both safe as regards an immediate score and also an obstacle to further scoring. Suppose, for example, a double baulk offers the non-striker an easy loser off the red when it is his turn to play, without, however, presenting even a reasonable chance of a "speculator" to the striker. If this position is dealt with by a nicely played miss which leaves the player's ball in baulk in that commanding position near the middle of the "D," which is so often the best "in-baulk" position for the cue ball in any case, then when the other man has made his red loser he will find the position of the white anything but conducive to the compilation of a sequence of losing hazards off the red. It will hamper him, cramp his cueing, and may be lucky enough to rest on the very spot where he wishes to place his ball to make a hazard. Under these circumstances a first-class player would lose no time in arranging for a cannon

which would bring the awkwardly placed white under his control, and thus permit a continuance of the break on normal lines. But players who can do this on a system very seldom cross cues with amateurs, except in exhibition games, and it will be found that in the ordinary run of club and handicap play between amateurs, even capable amateurs, the miss played as described pays better than a wild attempt to disturb the red at any cost. If the red is placed so that it must be pocketed when played upon, then a miss calculated to leave the balls safe after the winning hazard has been made should always be played. Very frequently, almost invariably, the correct miss should leave the ball just below the middle pocket and tight against the side cushion, thus offering a forcing losing hazard off the spotted red with but little risk of presenting an opening to the man who pockets the red. On the contrary, he will usually find himself in an extremely unenviable position. It is an odds-on

chance that his ball will be somewhere in baulk, possibly near the bottom cushion, and his chance of a score as remote as the prospect of a dividend from a wild-cat company. Yet he must do something—he must make some attempt to score, unless he is content to leave the red open to attack. In all probability he will have foreseen this contingency before attempting to pocket the red, and may fail to score owing to a strenuous and difficult attempt to gain respectable after position. It is, however, more probable that the red will be pocketed and the desired after position more or less muddled, when an heroic attempt to continue the break proves futile nineteen times out of twenty and opens the game for the man who gave the miss.

This theory of probabilities is at the bottom of all safety play, and it must never be forgotten that it is the likelihood of making a break which matters; the chance of an immediate score may often be relatively unimportant. Naturally, this

theory is usually brought to bear on double baulks, because this form of safety is the most common and efficacious. In actual safety play the theory of probability works out like this: A man says to himself: "As the balls lie I cannot hope to score, and my opponent has no chance when it is his turn to play. If I give a miss to point 'A' the balls will remain safe for both of us; if I give a miss to point 'B' the balls will remain safe for him, but I shall have a chance of scoring." Very well; the miss to point "A" is always bad; the miss to point "B" is usually good unless it can be countered by an easy safety miss which turns the tables most decisively under B.C.C. rules, which limit the number of consecutive misses, and compel a stroke, however desperate, after the second consecutive miss, unless a score or a double baulk intervenes. Alternatively, it may be that the player has to sum up the situation like this, especially if he is confronted by a double baulk. "This position," he might say, "is no use to me, and no use

to the other fellow ; I'll give a miss and try to leave myself something." This is quite correct ; but suppose he has to say, "I cannot score, but my opponent can—what shall I do?" The best answer to this question is to give a miss in such a way that the chance of making a break is reduced to its utmost minimum.

When the balls are out of baulk a player may still have to commune within himself in the manner indicated in the above paragraph, and his line of action will conform to the principles laid down. But there is this important difference : he may often play at a ball for safety instead of giving a miss, and the B.C.C. rule already mentioned has made this clever and interesting development of great importance. Countless diagrams could be drawn to illustrate safety strokes playable in this manner, to say nothing of those which could be supplied to illustrate the why and wherefore of giving a miss. It is, however, very doubtful indeed whether they would help the average cueman. He can be

taught the general principles of safety play, but he simply must work out his own theory of probability when he has to deal with any particular grouping of the balls. This means practice, practice best carried out in the following manner : Place the balls for a break, score as many as you can, and when the balls run safe, first of all decide what was wrong with the stroke which caused the trouble, and then try to think out a satisfactory safety move which will shift the trouble to the other man. In this way, and in this way alone, will an adequate idea be gained of the true scope and possibility of safety play. A variation is necessary if the cueman is so skilful that he seldom or never leaves himself a double baulk ; then he must set up a few double-baulk positions and work out the theory of probabilities to his own satisfaction. A very little of such practice will prove that both in execution and design safety play often makes a full call on the highest billiard skill, and that its refinements are so amazingly subtle that only

a great master, gifted with an exceptional temperament, can hope to exploit them consistently with advantage. Temperament counts for much in safety play, and the man who can play a scientific safety game right throughout the whole of a trying and strenuous contest is bad indeed to beat, and must have a temperament which nothing in the billiard world can ruffle in the least.

The temperamental factor tells most heavily when there is just a chance of scoring and continuing the break by means of a masterly stroke, a stroke so difficult that the odds are against it, the only certainty being that failure to score will leave the balls nicely placed for your adversary. When this is the case a safety stroke is often quite simple, but the lure of the possible score proves irresistible; temperament tells; safety tactics are ignored, and, too often, the penalty is paid. On the other hand, especially among amateurs, it is bad policy to overdo safety play, if only because it is making an

adversary a present of the chances of the game. No amount of safety will alter the fact that six pockets are always open for any or all of the balls, and that the chance of a cannon is always with us. In first-class billiards this may not matter a great deal, although it is not altogether a negligible quantity. But among amateurs, especially in handicap games where useful players have to concede long starts, the back-marker will find that nothing short of the double baulk is at all reliable. Fortune favours beginners, especially brave beginners, and, provided they have a ball to smash at right lustily, their chance of scoring is never too remote to be dismissed as of no account. In any case, it is a mistake to give them this chance if it can possibly be avoided, the more so as they are not in the least likely to make a break if a tall shot just fails to score and leaves a first-class opening. If, however, the big stroke does materialize, the moral effect is considerable, and takes its toll of power from the elbow of the recipient of

points. This extreme illustration may not be in accordance with the highest billiard ideals, but it is sound sense in ordinary handicap play, and it illustrates a principle which applies to every class of billiards, a principle which, to an extent, may fairly be likened to relinquishing the offensive in war. It is obvious that no matter how safe the balls may be, the man behind the cue has what chance there may be of scoring, and the theory of probability must be weighed with great care before this chance is given, free, gratis, and for nothing, to an eager opponent.

The state of the game also enters very largely into billiard tactics. By way of an extreme instance we will imagine that two ordinary amateurs are contesting the final stage of a keen game—one requires but a single point to win, the other needs fifty or sixty. The man who wants but one point is in play and the balls are safe ; he promptly runs a coup, giving three away, and leaving his opponent with only the red ball to play at, and that badly

placed. A miss is impossible, and it is long odds that a stroke at the red will leave an opportunity of making the necessary point for a win. The same idea can be carried out if two or three points are wanted, and the state of the score warrants giving three away in order to shut the other man out. The state of the game is also the determining factor when faced by a difficult and risky stroke. If a break simply has to be made to give the player any chance, he must go for the stroke; at the worst he will only be beaten the more badly for missing it, and at the best he may put together a break which will bring him within striking distance of his man. Therefore it becomes sound policy to go all out for a stroke which, if the scores were more even, should be left severely alone. The man who is ahead, even a long way ahead, ought not to indulge in this sort of thing, as it is wonderful how soon the lead changes hands at billiards. Just a turn in the run of the balls, a few openings exploited profitably and left

barren when the break is finished, and the comfortable lead is gone ; then the man who went out for the big stroke is sorry he did not play for safety.

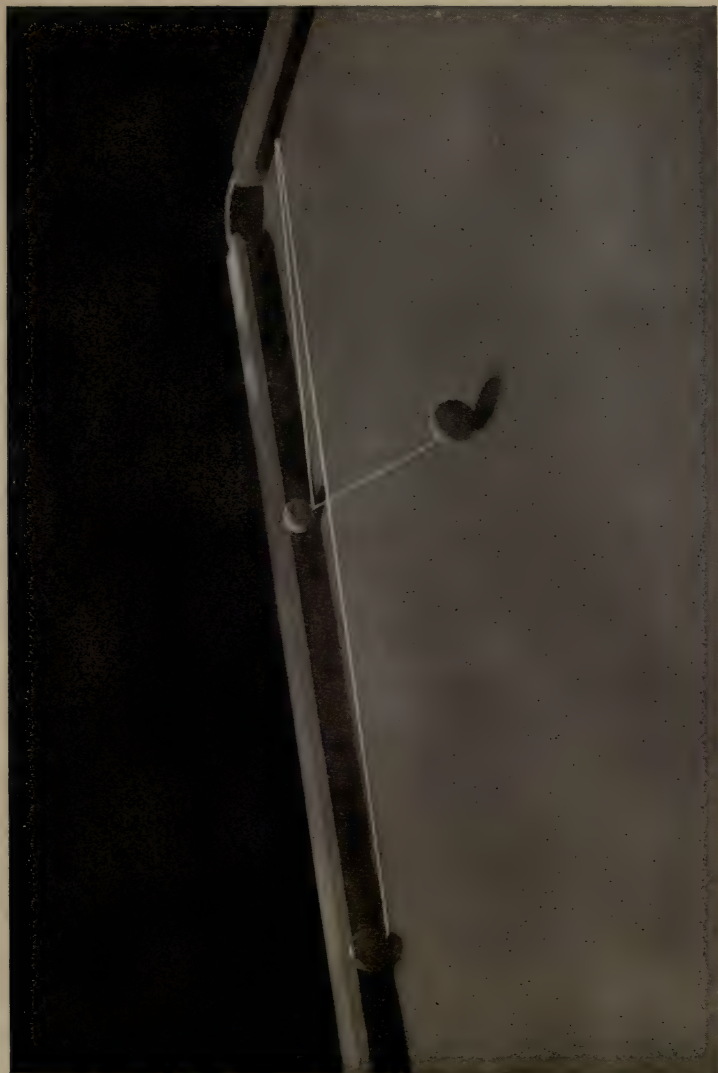
At the same time, cushion crawling is a vice which cannot be condemned too strongly, and the B.C.C. rule which scotched it so severely is most commendable. Judgment, judicious judgment, coupled with a cool head and a fine knowledge of the game, is in constant demand when it is required to strike the happy medium as regards safety play, a most difficult and trying phase of billiards. Individual preference counts for a great deal, of course, but the average amateur would be well advised to adopt a style of play which erred on the side of undue enterprise rather than excess of caution. Too much safety play cramps a man's game, tends to make him nervous and undecided in his play, unduly diffident of his cue-power, and, incidentally, a nuisance to spectators and by no means popular as an opponent.

CHAPTER XV

THE PERMISSIBLE MARGIN OF ERROR

A FURTHER selection of strokes which extricate a player from trouble now demands notice, and these strokes should be studied with special care, as, owing to lack of perfect positional control of the balls, such strokes are frequently left by the amateur. A perfect break contains none of these strokes of more than ordinary difficulty. One easy stroke is played to leave another of the same kind, and so the ideal break flows on with scarcely a check until it runs well into three figures. But this ideal does not take the amateur very far in practice. He does his level best to keep the balls well in hand, but sooner or later—all too soon as a rule—they break away and arrange themselves awkwardly. Then the stroke which scores and regains

position is the need of the moment, and a stroke of this type is shown in our photo of a kiss cannon off the top cushion. Frankly, this is a very difficult stroke, so difficult that it is scarcely the game to attempt it unless the need for a break is imperative under the circumstances mentioned towards the end of our last chapter. The cue ball is struck rather high and to the left, and clean, free cueing is absolutely essential. It is a quick, lively stroke, and the main trouble is to gauge the correct point of contact with the object white, a task which calls for such judgment that the stroke is no certainty even for the best players. Pace, also, has to be estimated to a nicety, as too hard a stroke will go anywhere after the kiss contact; and yet the strength must not be too feeble or the cannon cannot be made. Played properly, the cannon is completed with sufficient strength to drive the red ball over the middle pocket, and it will be found that if the stroke is made at all this desirable after position results nine times out of ten.



A DIFFICULT KISS CANNON

Therefore, the stroke is justified as a means of forcing a break when nothing but a break is of the least use to the striker. If, however, the state of the game was fairly normal, it would be better to consider the theory of probability and devise a safety miss of no mean calibre.

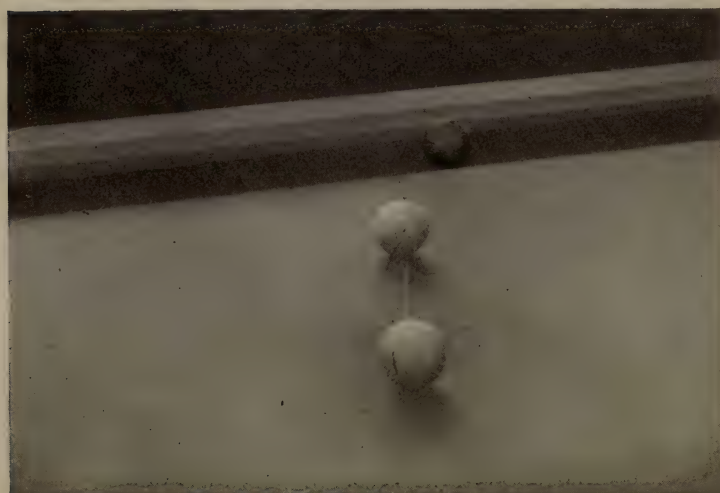
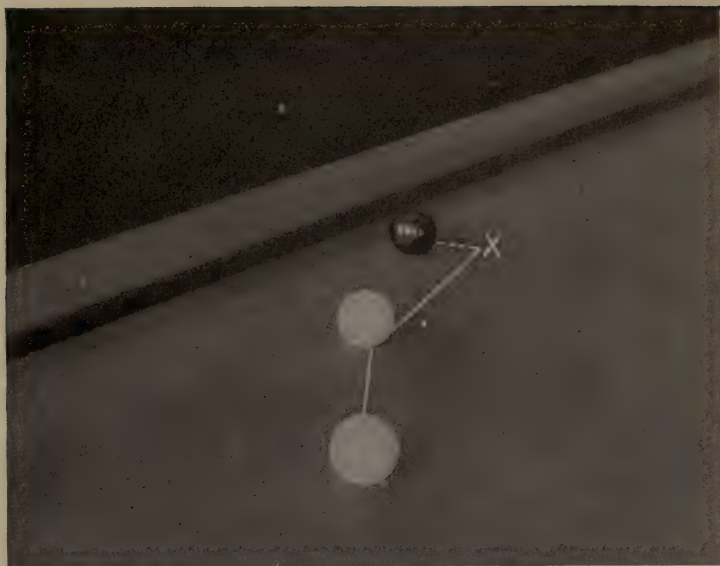
Sometimes, but not too often, there is a very easy way out of what appears to be an insuperable difficulty. A case of this sort is shown in our photograph of the three balls in line along the top cushion and dead tight against it. The two object balls are touching, the cue ball is the merest shade away from the object white. Apparently, there is nothing on except a masse cannon of such pronounced difficulty that but few British players would attempt it, and fewer still achieve it. Actually, however, the stroke is so easy that it ought never to be missed. It is only necessary to raise the cue-butt a little and play a smart stroke down the table, a stroke which grazes the object white with enough force to kiss the red along the

top cushion into the pocket in the direction indicated by the dotted line. At the same time, the cue ball returns from the baulk cushion and comes to rest in excellent position for a cannon off the spotted red. The object white does not move; it transmits its mobility to the red, and it is worth noting that a similar effect is produced whenever the object balls are touching each other.

Another and better-known example of an apparently impossible stroke which is easy enough "when you know it" is provided by placing the red on the billiard spot with the white ball directly behind it and tight against the top cushion. The cue ball is in hand, and if it is placed on the centre spot of the "D," thus bringing all three balls dead in line, it is only necessary to play straight at the red and not too hard to make the cannon every time. The kiss does it, as a trial stroke will soon prove. The stroke is easy and certain unless the red happens to be struck exactly in its centre, a very remote contingency,

as although the centre of the red is aimed at, it is seldom indeed that the stroke is played with such exquisite truth that the cannon is spoilt by a double kiss. The range is great enough to make the development of sufficient error a virtual certainty, and, strange as it may seem, this stroke succeeds because cuemanship accurate enough to propel a ball from the "D" to the billiard spot without the least deviation from a desired line is so rare that its absence may be anticipated with almost complete confidence. Fortunately, the permissible margin of error in billiards is constant enough and of sufficient dimensions to render such deviation from perfect accuracy of no material consequence in actual play, at any rate so far as the all-round, three-ball, open game is concerned. It is not possible to define this permissible margin of error with any approach to scientific exactitude, but its existence and its material bearing on the game are capable of practical demonstration with the utmost ease. Place the red on the

billiard spot, and the cue ball in position for any of the familiar half-ball strokes into either of the top pockets. Note the position carefully, and make the losing hazard three times in succession, playing each stroke from as long a range as is conveniently possible. After each stroke make a careful note of the exact course of the red ball, and it will be found that although the hazard was made in each instance the red ball may easily have struck the cushion in three different places, thus proving that each stroke was not played in precisely the same manner, although each was accurate enough to score, and, very likely, leave irreproachable after position. If the red is placed on the centre spot, and the long loser played from hand, played properly, with strength enough to bring the red ball into position over the middle pocket off the third cushion, it will be a mere fluke if the red comes off the third cushion at exactly the same spot in two consecutive strokes, although both the hazard and



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satisfactory after position are made in each case. This example is most instructive, as by the time the red leaves the third cushion the effect of the original amount of permissible error in ball-to-ball contact has increased to such an extent that a series of really well played strokes may bring the ball anywhere along a foot of cushion when the third contact is established, and it is possible enough to make the hazard in spite of an appreciable increase in the amount of initial permissible error thus evidenced.

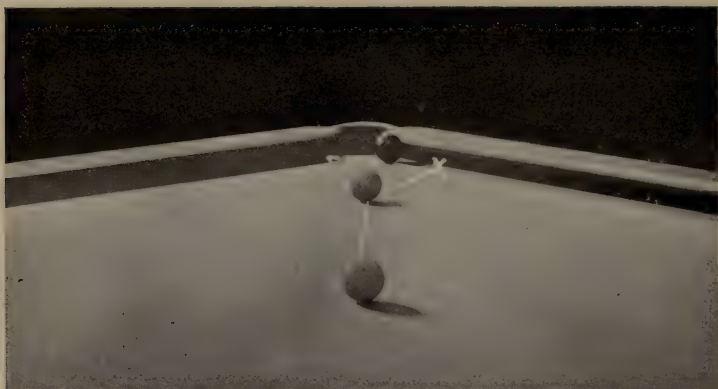
Naturally, there is a limit to the amount of permissible error in billiards, and the limit varies enormously. It is greatest, perhaps, when the red ball hangs on the very brink of a pocket and has only to be struck anywhere to be pocketed, and becomes almost non-existent in close cannon play and many fine touches in the top-of-the-table game. Taking ordinary strokes, winning hazards as a whole offer a minimum of permissible error, as the object ball must be struck in one place,

and one place only, unless the hazard is absurdly easy. The losing hazard is easier because, as we have already proved, slight variations in ball-to-ball contact do not affect the subsequent course of the cue ball to such an extent that the stroke is missed; but it should be noted that the margin of permissible error in losing hazard play dwindles to vanishing point as the requisite ball-to-ball contact becomes finer and finer. Cannons are easiest of all, as the second object ball presents a larger target than a pocket, and often lies near a cushion, which increases the probability of a score, makes it "a large ball," as they say in billiard-rooms. In positional play, however, the permissible margin of error is much less than it is in stroke play, which brings us to the obvious conclusion that the greater the player the less the permissible margin of error. This is true, but it is also true that calculated and material diminution of permissible margin of error involves continuous practice welded to abnormal

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natural aptitude. This brings us to the lesson the average amateur has to learn from the permissible margin of error. It is a gift from the gods ; without it billiards would be altogether too exact for the average man, an infliction instead of a recreation. But it must not be abused ; it should be accepted with thanks, but never presumed upon. Considered rightly, it bears on the grand plan of the amateur game, and no particular stroke should ever be played with the idea of pandering unduly to the permissible margin of error. Each stroke should be played as well and truly as the cueman can contrive when he does his level best, but he must recognize that unless, in a billiard sense, he is "divinely great," the permissible margin of error means much to him, and that as a mere mortal it behoves him to arrange his game accordingly. He should cultivate break-making on open and simple lines, specializing in strokes and scoring sequences in which the permissible margin of error compensates for his inherent lack

of manipulative perfection. This is sound strategy, and the man who adopts it will find that he is playing in accordance with a general idea which wins games. Broadly speaking, the practical utilization of this idea means making full use of the "D," that potent half-circle the whole of which is available as vantage-ground from which the cue ball can be directed at an endless variety of strokes offering a reasonable margin of permissible error, and affording a great contrast to that limited area at the top of the table in which a clever professional can revel because he has the accuracy of a piece of human machinery.



TWO CLEVER KISS CANNONS (pp. 232-233)

CHAPTER XVI

MORE KISS STROKES

A FURTHER selection of kiss strokes now demands attention. The amateur can scarcely know too much about strokes of this type, as they so frequently help him out of trouble caused by his imperfect positional control of the balls. Our first example shows the balls nearly, but not quite, in line, with the red tight against the side cushion. It is impossible to make the cannon by a direct "run-through," but it becomes feasible enough if the first object ball is played against the edge of the red ball, just moving it far enough along the cushion to enable the cue ball to run through and complete the cannon. A little right-hand side on the cue ball may be utilized, but the main difficulty lies in gauging the correct contact between the first object ball and the red. The

BILLIARDS

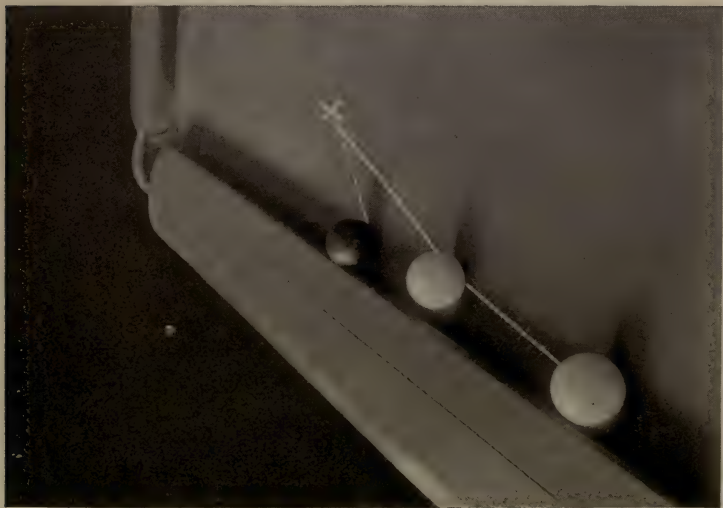
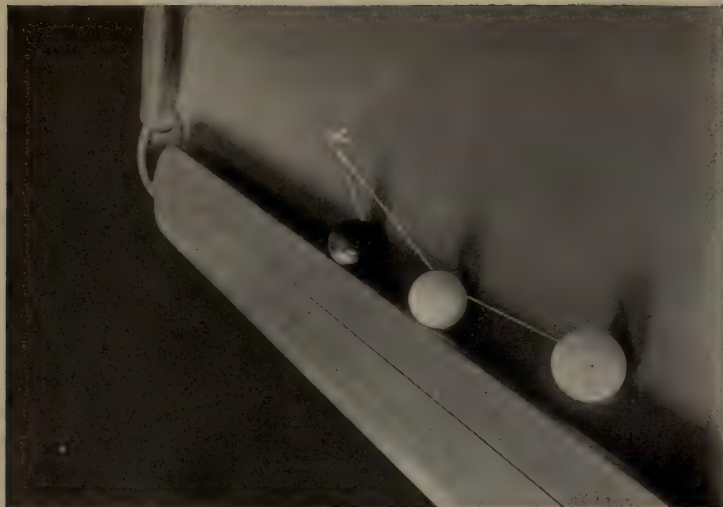
same may be said with even more force as regards our second stroke, a very pretty cannon which depends for its effect on the object white striking the cushion behind the red and cutting the ball away in the direction shown by the dotted line, thus permitting the cannon to be made at the spot indicated by a cross on the photo. Both the strokes mentioned in this paragraph have to be very nicely handled, in which respect the second example is perhaps the more difficult. There is such a tiny space between the red ball and the cushion that great accuracy is called for to prevent a direct contact between the first object ball and the red, a contact which spoils all chance of the cannon.

Some very beautiful kiss cannons depend for their effect on the completion of the stroke after the balls have travelled a considerable distance, and their execution is a useful lesson in the angles of a billiard-table. Two strokes of this description are now before us, and it will be noted that

in the first example the proximity of the red ball to the corner pocket seems to offer a chance of "planting" the red, which is preferable to the cannon. Of course, the "plant" is on, but a trial stroke or two will soon prove that it is far more difficult than the cannon, and a great deal more risky, as failure leaves the red ball in splendid position for "the other chap." The stroke is fairly easy if played as shown in the illustration, where the continuous line shows the progress of the cue ball and a dotted line the direction of the first object ball, a cross indicating the spot where the cannon is completed. The vital thing is to make sure that the first object ball comes off the cushion in such a manner that the red is kissed along the side cushion, as this is really the essence of the whole stroke. Providing the red is sent along the cushion in this manner, there is some margin of variation allowable in the exact spot where the cannon actually takes place, and experiment will show that it is really

difficult to miss the stroke when once the red is steered in the required direction. After position is quite good, and the stroke is one which ought to be mastered, as variations of it are not infrequently met with in actual play.

Our next example is decidedly more difficult, as the stroke must be timed with something approaching professional skill to bring about the cannon at the spot shown by the cross in the photo. It is a good stroke and a clever one, leaving excellent position from a bad grouping of the balls, but it wants getting, and those who master it can say that they have added a first-class stroke to those they keep "in the bottom of the basket" for emergencies. The trouble is to gauge the run of the balls so that the kiss is sure to happen, and it will often be found that the red ball will take the course indicated by the dotted line rather too quickly to enable the cue ball to travel along the continuous line and make the "kiss" cannon in the vicinity of the cross. When this happens,



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the fault is probably due to cramped cue-manship. It may well be that in the effort to make absolutely certain of the correct ball-to-ball contact the cue action becomes a little stiff, more of a poke than a swing, thus failing to impart the requisite forward rotation to the cue ball. The cannon may be made in spite of this defect, if the red has been struck with force enough to bring it away from the second cushion in the direction of the lagging cue ball; but it is not advisable to rest content until the cannon has been made perfectly. As a matter of fact, the cannon is often made in quite a variety of positions by following out the idea shown in the photo, and although these variations are instructive so far as they show the possibilities of the class of stroke, yet in this particular instance it is as well to persevere until the cannon is made exactly as illustrated.

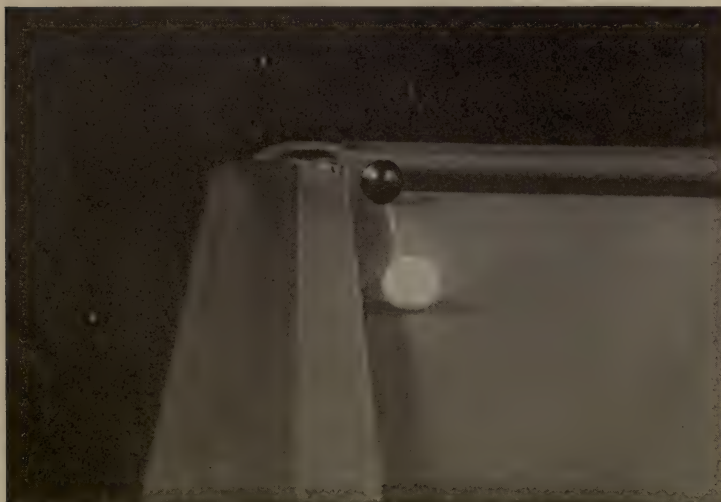
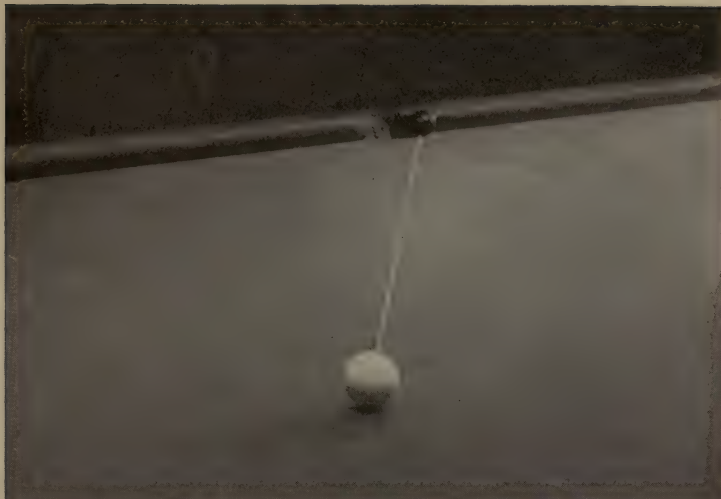
A brace of very instructive strokes, both along the top cushion, constitute the next item on our programme. In each case a

direct ball-to-ball cannon is not possible, but a kiss cannon can be scored at the points shown by crosses in the photos. These two strokes have a great deal in common, and it will be found that the first object ball has to be struck much finer than might be supposed. A thick contact merely kisses the red straight along the cushion, and renders the cannon impossible, whereas the correct contact kisses the ball away from the cushion into the path of the on-coming cue ball. These are no strokes for beginners; they demand capable cuemanship and practised touch, but they are extremely useful because they show how a score can be effected in spite of a most awkward lie of the balls. The actual strokes shown in our photos illustrate cannons of a type often played by great cuemen who wish to retain position at the top of the table, and it may well be that many an amateur would prefer the chance of a run-through losing hazard played with strong cushion side into the top pocket, a stroke which materializes often enough unless a second

contact with the object white intervenes, but is very uncertain in a positional sense. Again, in other parts of the table where such a position might occur, the prospect of a run-through into a pocket would be too remote to be considered, and the cannon as shown would be the only means of continuing the break. And even apart from their scoring and break-saving value, which is considerable, these strokes are such pretty examples of crisp cuemanship at close range that they are worth practising simply on this account.

Kiss effects for positional purposes are most useful at times, and there is no more lucrative stroke of this kind than the double-kiss red winning hazard at the top of the table shown in our photo. This stroke, if played almost full on the red, pockets that ball by means of a double kiss and leaves the cue ball in perfect position for a natural angle half-ball loser off the spotted red. It is impossible to bring about this most desirable result in any other manner, and as the position is constantly cropping up, the stroke should

be practised until it becomes a certainty. A very little practice will make this stroke safe and easy even for players of moderate ability; the great thing is not to play too hard, and as the after position is so lucrative anything short of complete mastery of this stroke is inexcusable. Much the same may be said of our second example, a losing hazard into a middle pocket off a red ball tight against the far shoulder of the pocket. The hazard can be made by a fine, clipping ball-to-ball contact, but wretched position is left if the stroke is mishandled in this manner. If, however, the ball-to-ball contact is made thick enough to kiss the cue ball into the pocket, the red ball will clear away towards the centre of the table in such a manner that a losing hazard played from hand into the same pocket will carry the break along quite nicely. Strength should be gauged with care, as it is not clever to bring the red too far from the side cushion, thus needlessly increasing the probable element of difficulty in the succeeding stroke.



A KISS POSITIONAL LOSER (p. 238)
A DOUBLE-KISS RED WINNING HAZARD (p. 237)

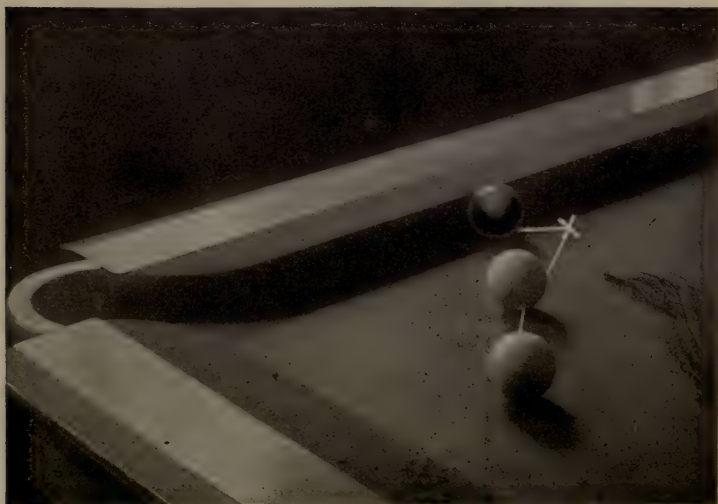
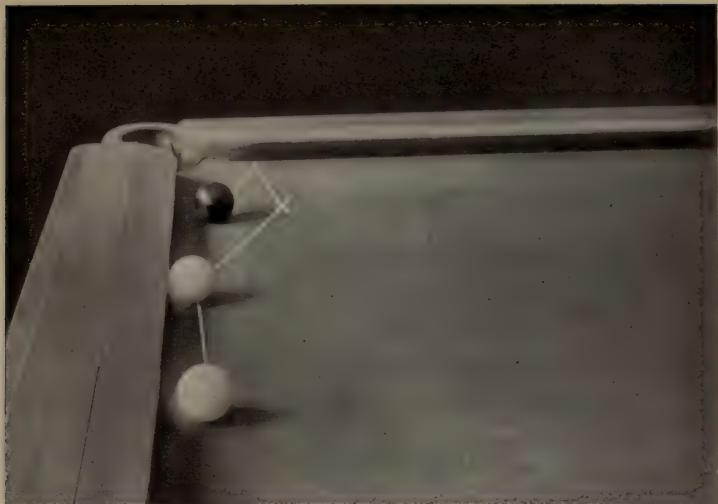
CHAPTER XVII

BILLIARD TACTICS

SOMETIMES, but not too often, kiss cannons are absurdly easy, even when they appear very difficult to the uninitiated. For instance, many amateur players would feel far from comfortable if faced by the cannon shown in the first photograph given in this chapter. The balls are in line, and the cannon appears to be a very weird performance. It is nothing of the kind. If a stroke slightly thicker than half-ball is played on the object white, that ball will kiss the red away from the cushion and bring it into contact with the cue ball every time, thus making the cannon at the point indicated by a cross on the illustration. Strength must be studied, of course, but is not difficult to gauge; the main thing is to strike the cue ball

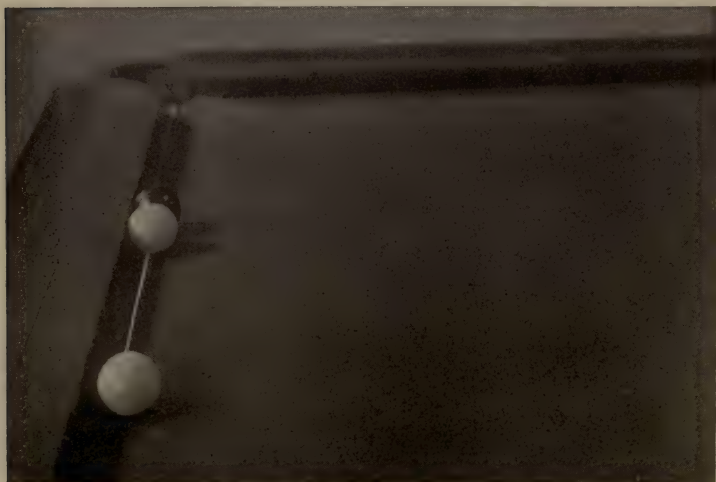
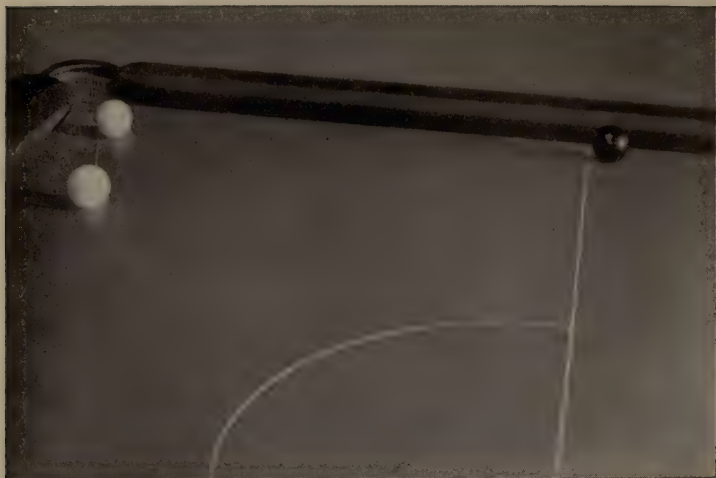
freely and rather high to impart sufficient forward rotation to enable the cue ball to catch the red. A little running side is helpful, making the stroke more certain.

Our next stroke is by no means so simple. The object white is tight against the cushion, which the cue ball and the red clear by about an inch. At first sight it looks as if a run-through losing hazard into the corner pocket is the game, but the object white is liable to make a fullish contact with the red and thus create a kiss sure to spoil the hazard. This makes the hazard far more risky than sound, and renders the kiss cannon decidedly preferable. The whole secret of this stroke lies in playing a nice flowing shot at the object white, with a cue contact above the horizontal centre of the cue ball, and a ball-to-ball contact calculated to send the cue ball along the continuous line in the photograph. When this is done, it will be found that the first object ball will kiss the red against the cushion,



A PROFITABLE CANNON (p. 240)

AN EASY KISS CANNON (p. 239)



A KISS LOSING HAZARD (p. 247)

A TACTICAL STROKE (p. 241)

from which it will rebound and make the cannon at the point marked by the usual cross. It will be noted that the stroke must be played with a fair amount of freedom to transmit the requisite movement to the red. A little practice will show the correct strength, and as similar positions are far from uncommon, especially at the top of the table, this class of cannon should be studied and practised assiduously. Here, again, a little running side is helpful.

Billiard tactics enter very largely into our next stroke. The balls are in baulk. The cue ball lies approximately midway along the bottom cushion, and the two object balls, tight against the cushion, are touching each other. The position can be seen by a glance at the photo, and it needs no expert to say that a red "plant" is most decidedly "on." Quite so; it is only necessary to play full on the white at any reasonable pace and the red will run along the line in the photo and drop into the pocket. What then, what

is the leave worth ? Nothing much. The red is spotted, the cue ball and the object white are left almost touching each other, and a fearful and wonderful "prospector" seeking a fluky cannon off several cushions is the only outside chance of an effective score, unless something terrific in the masse line of business is exploited. Possibly, if a dangerous risk of missing the "plant" is accepted, position of sorts can be obtained by slight variations of contact with the object white, variations which can be experimented with even to the extent of striking the cushion slightly in front of the white, and the effect of side on the cue ball is also worth trying, "for instructional purposes only," as they say in the Service. It will be found by no means difficult to work out a stroke on these lines which "plants" the red well enough and leaves the cue ball a few inches from the object white in such a manner that an awkward screw loser, played with an abundance of side along the bottom cushion, is within the

A POSITIONAL PROBLEM 243

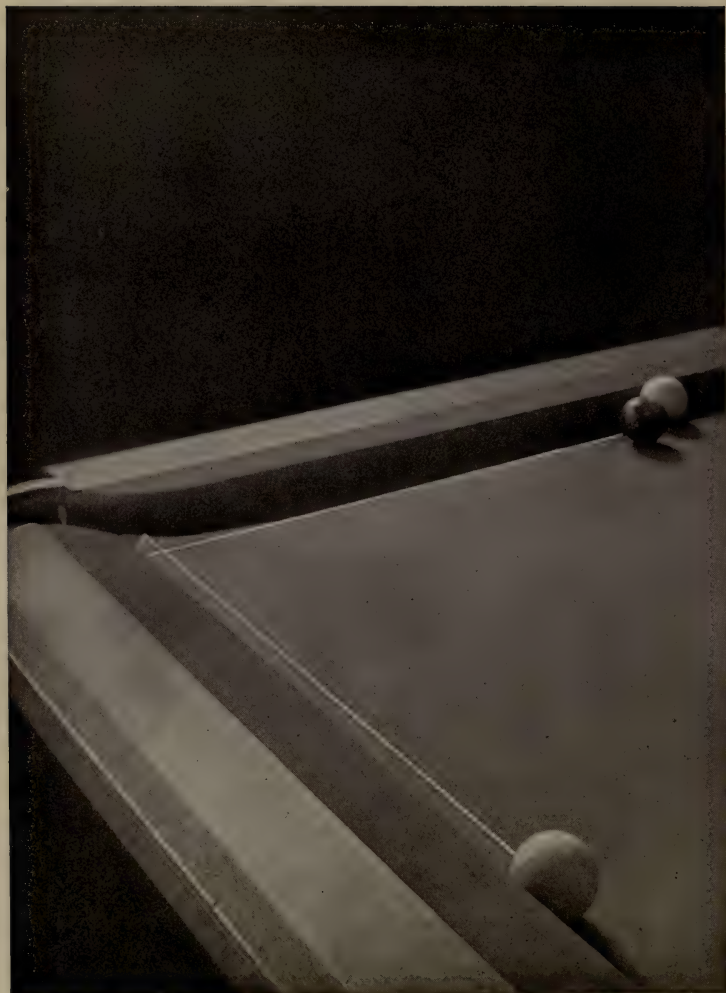
power of a finished exponent of big strokes, and a specialist with the rest into the bargain, as most players would have to bring this implement to bear on the stroke. Altogether, such a leave is not worth striving after; the best variation designed to leave a losing hazard off the white is a bold stroke played with plenty of screw which brings the cue ball back at a convenient angle for a run-through loser off the white. This stroke, however, means taking such a liberty with the prospect of the "plant" that too much is risked for the sake of a satisfactory positional sequence. The trouble is that all strokes which endeavour to "plant" the red and leave a white loser of sorts are discounted because the position of the object white remains virtually unchanged; the ball may move ever so little from the cushion, but there is nothing much in it; and in face of this difficulty it is advisable to abandon all idea of planting the red and leaving a loser in favour of a fresh scheme.

We are taking it for granted that the state of the game demands a break, for if this is not the case there is much to be said in favour of planting the red and then engineering a safety move by means of a well-judged miss. It depends on the aspect of the scoring board, and any difference there may be between the billiard ability of the striker and his opponent. In the latter case, if the striker is capable enough to concede a useful start, he should try to continue the break, even if the state of the score is normal on the handicap; but if at the moment he has rather the better of a hard-fought game against an opponent of equal calibre, he will do well to think at least twice about the safety sequence. Points like these seldom enter into the professional game, where the general level of break-building is so high that sound safety is almost invariably better tactics than a brave attempt to continue a break by means of a most difficult stroke which is sure to leave the balls nicely placed

in the event of failure. Amateurs, however, especially those who are skilful enough to be called upon to concede points against the great majority of their opponents in handicaps, are entitled to take a rather different view of the matter. As a rule, they will not be heavily penalized if they happen to present an opening to an opponent through missing an enterprising stroke, and when such a stroke succeeds they gain not only the points scored by continuing their break, but also a moral ascendancy which they throw away by playing for safety unless it is absolutely the only thing possible. A few clever strokes have a match-winning value peculiarly noticeable in a game between amateurs when a good man has to struggle against a formidable total of points the handicappers have piled up against him before he strikes a ball. In such a game nothing is more demoralizing to the recipient of points than the successful accomplishment of a few high-class strokes he knows to be quite beyond

his powers, especially when such strokes are obviously the means whereby a break is either commenced or continued afresh from a point where failure appeared certain and imminent. On the contrary, nothing encourages an adversary of this description more than the marked respect implied by a cautious exploitation of the strict rigour of safety play.

Having resolved upon attempting a score which will open the game if it materializes, the obvious "plant" is ignored, and a kiss cannon played by aiming and cueing exactly as if a crisp run-through into the pocket was intended, striking the cue ball rather high to impart plenty of forward rotation, but not nearly high enough and hard enough to set up that momentary pause on ball-to-ball contact so noticeable when a true follow-on stroke is manipulated. The stroke is not forced in the least; the idea is to get enough "push and go" on the cue ball to clear the object white out of the way by sheer cuemanship helped by the ball-to-ball con-



A USEFUL CANNON (p. 250)

tact for a run-through into the pocket. This contact will not "plant" the red, but will send it against the far pocket jaw and bring it back to the cue ball, thus completing the cannon. Handled in this manner, the cannon is scored much more often than appears likely in theory, and can be reduced to a virtual certainty by thoughtful practice, practice mainly devoted to the attainment of that free and confident cue delivery which clears the way for the cannon.

Tactically, our next stroke is identical with the cannon we have just discussed. Any beginner can see the obvious "pot the white" with a double baulk to follow, a safety move few would care to ignore unless the circumstances referred to in our last paragraph were strong enough to render it worth while to strive to retain the break. This can be done by means of a very clever stroke, a kiss losing hazard off the white. Played rather fine, as shown in the photo, the object white is directed against the outer edge of the pocket jaw,

rebounds across the mouth of the pocket, and kisses the cue ball into the net. Here, again, cuemanship is put to the test; no bungling, poky stroke is of the least use, as it cannot score even if the ball-to-ball contact is perfect. The main difficulty is to time this stroke effectively, to get enough run on the cue ball to bring it into the required position before the object white has time to effect a premature return off the pocket jaw which spoils the whole thing. This is far from easy, and depends so much on the pace of the cushion, and on the object white impinging on a fractional part of an inch of cushion surface, that the stroke must be written off as more brilliant than reliable. It is, however, worth cultivating, as it not only saves the white ball, but kisses it along the side cushion into excellent position for a cannon, and may thus be the means of opening up a break and snatching a game out of the fire.

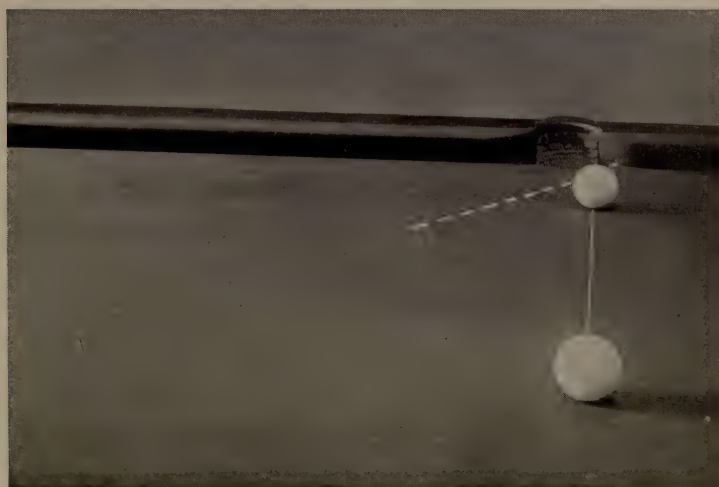
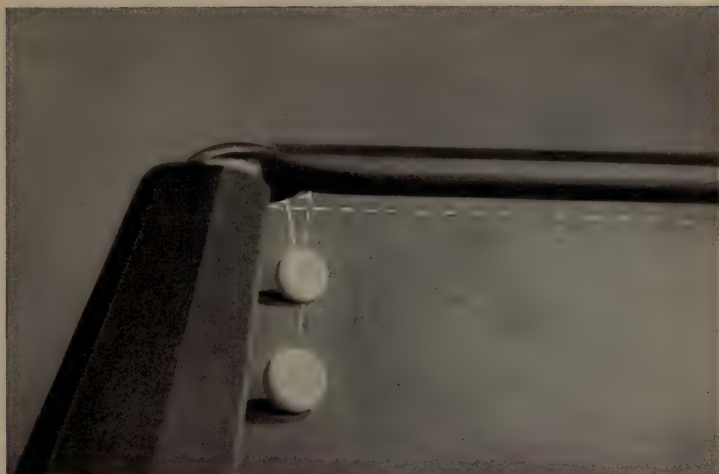
CHAPTER XVIII

USING THE POCKET OPENING

THE pocket opening, especially on a standard table, is so apt to get in the way when it is particularly desired to steer a ball into the depths of a pocket that any means of turning this normal obstacle into a scoring force is both gratifying and helpful. Opportunities for strokes of this type are far more common than the uninitiated might suspect, and as the jaws of a standard pocket tend to make these strokes more certain and easy, we have another strong argument in favour of the universal adoption of standard tables. Some of the strokes dealt with in this chapter are scarcely playable on an "easy" table, and cannot be exploited at all successfully on an "ordinary" table without considerable local knowledge of the pockets of that particular table. In any

case, however, a general knowledge of the method by which a pocket jaw can be utilized to the advantage of the player is well worth acquiring; it often gets a man "out of trouble," as they say in the billiard vernacular, and it is not to be regarded lightly as something bordering on the realm of "fancy" billiards.

The general idea of these strokes is made clear by our first example, a cannon played by striking the further jaw of the pocket, from which the ball rebounds to the opposite jaw, and then starts off in an entirely fresh direction along the cushion, thus enabling the cannon to be made as shown. The stroke is easy enough when once the correct spot on the pocket jaw is determined. No side is required, but it is as well to strike the cue ball rather high and crisply to give the stroke life and vivacity. Many slight variations of this stroke are possible enough and, although never absolutely reliable, have a way of materializing on occasion with startling results. Their chief merit lies in the fact



SAVING THE WHITE BALL (pp. 251-252)

that they offer a chance of scoring when nothing else is on, and strokes which possess this attribute have a value of their own to the amateur, who so often has to force his way from stage to stage of a break because he cannot control the balls for long sequences of perfect strokes. Our next stroke is very similar in character, but differs altogether in execution, because the object ball instead of the cue ball is directed against the pocket jaw, the idea being to enable a run-through losing hazard to be made. The stroke is fairly well known, and so easy that it ought never to be missed by a capable amateur cueman. It is only necessary to make sure of the direction of the object ball—no very difficult task—and to impart enough pocket side and “follow” to the cue ball, and the stroke becomes a “sitter.” The permissible margin of error is by no means inconsiderable, but the stroke has to be handled with great care and judgment if the object ball is so close to the pocket that it is doubtful whether it will

have time to get away before the cue ball comes along. On the other hand, the stroke is barely possible at anything approaching long range, as the strong side on the cue ball renders the requisite accuracy of ball-to-ball contact almost impossible if the cue ball has a considerable amount of table space to cover before it reaches the object ball. Nevertheless, within reasonable limits, the stroke is both safe and easy, and as it retains the white object ball, its value as a break-making stroke needs no further advocacy.

Another stroke which saves the object white now comes under review, but on this occasion the jaw of a middle pocket is brought into requisition. The stroke is made by directing the object ball against the pocket jaw in such a manner that the rebound brings the ball back in the direction indicated by the dotted line, while the cue ball follows through into the pocket. This stroke demands nice cuemanship and judgment of strength to avoid a kiss, and it will be found that the

correct pace is distinctly on the slow side, coupled with a central cue contact which does not impart too much forward rotation to the ball, which ought to just trickle gently into the pocket without an atom of energy to spare. Two more strokes, designed with the laudable ambition of saving the white ball, are next brought before us with the assistance of the camera. In each case the object ball is dangerously close to the lip of a pocket, but can be retained by means of losing hazards played off the pocket jaw, as shown in the illustrations. The strokes must be played with enough freedom to carry the cue ball over the brink of the fall of the pocket in the event of a slight error in ball-to-ball contact creating a needless degree of kiss effect. If this happens, always provided the kiss effect is not at all pronounced, the momentum of the cue ball will enable it to squeeze through into the pocket if the stroke is handled with reasonable freedom. Again, by playing these strokes at a reasonable

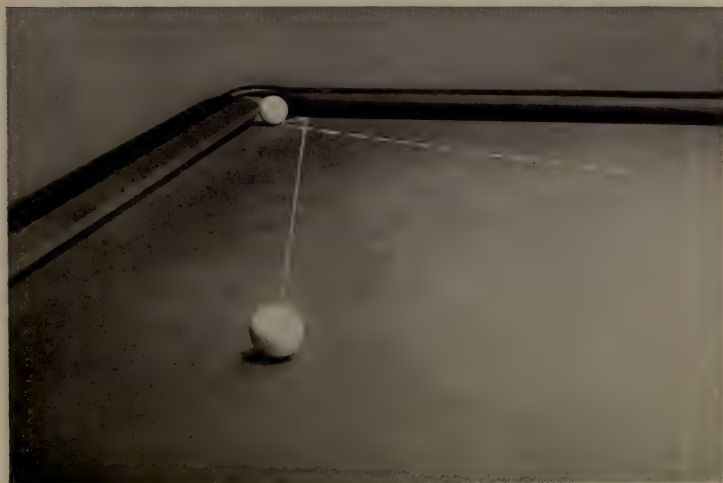
pace the object ball is driven well away from bad position in risky proximity to the pocket.

Some very clever cannon effects can be produced by means of a kiss off an object ball tight against the jaw of a pocket. A stroke of this class is so well shown in our photograph that it is not necessary to say much about the playing method. But it is as well to point out that this beautiful stroke is virtually impossible on an "easy" table, because on such a table the angle of the pocket opening would tend to throw the first object ball into the pocket at the instant of ball-to-ball contact. In any case, this contingency is always present, but the main difficulty lies in just "nicking" the object ball on the one spot where the kiss will send the cue ball in the right direction for the cannon. To accomplish this, exquisite judgment is called for, as the requisite ball-to-ball contact cannot be established unless the point of incidence on the shoulder of the pocket is estimated accurately enough to

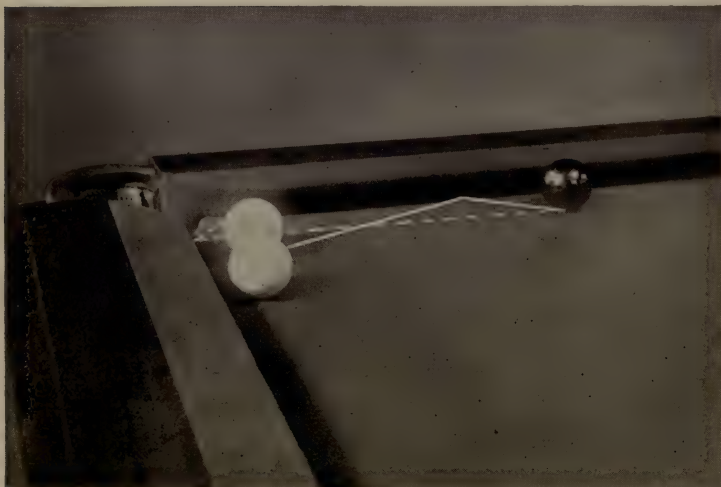
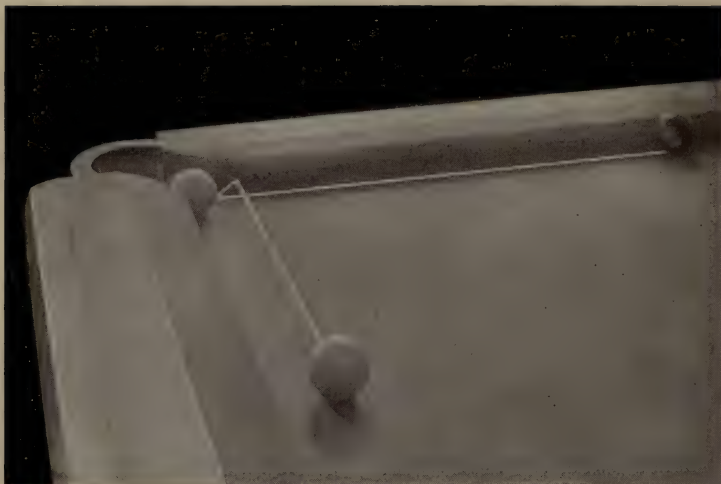
make sure that the abnormal angle of reflection coincides absolutely with the desired path of the cue ball. This is a very pretty problem, well worth working out in practice, if only to test the comparative merit of this method of effecting a score and saving the white ball instead of pocketing the white and playing for safety.

Our next cannon will serve to illustrate the principle of a subtle refinement in high-class positional billiards. The stroke is played by compelling the object white to make the now familiar journey across the pocket opening and then away along the cushion facing the player, which in this case results in excellent after position, the cue ball having time to make the cannon while the white is rebounding across the pocket and commencing to travel in the same direction, thus “bunching the balls” at the completion of the stroke and leaving a useful opening, unless fortune is indeed a good deal less than kind. There is nothing esoteric in the

execution of this stroke; the main thing is to avoid too full a contact with the object white, for which reason the cannon is made via the cushion, as shown by the continuous line in the photograph. Neat cuemanship is called for once again; in fact, all the strokes described in this chapter are of very little use to the man whose cue delivery is clumsy and stodgy, and he would be well advised to hark back to those portions of the book where cuemanship is discussed. The general idea of this particular cannon, however, merits careful study after the stroke has been mastered. Many awkward positional problems can be solved by directing the first object ball against some portion of the jaws of a pocket, and this possibility should always be kept in mind when positional control of the balls appears certain to be lost. Finally, all strokes which depend for their effect on the course of a ball after contact with the shoulders of a corner pocket should act as a warning in one important respect: they show,



SAVING THE WHITE BALL (p. 253)



A CLEVER CANNON EFFECT (p. 254)

A SUBTLE POSITIONAL REFINEMENT (p. 255)

as nothing else can, how very necessary it is to avoid the vicinity of the bottom pockets when playing strokes which depend for a satisfactory positional sequence on the object ball passing in and out of baulk. Many an amateur comes to grief through neglecting this precaution, as the open losing hazard game favoured by the great majority of amateurs is very liable to meet with disaster owing to the object ball fouling one of the baulk pockets and running dead safe along the bottom cushion. It is not at all difficult to guard against this danger, which is really only formidable because so many amateurs disregard it, and players of this type will find their general game strengthened and improved if a study of the strokes in this chapter does nothing more than reveal to them the true scope and effect of the positional pitfalls which lurk around the baulk pockets.

CHAPTER XIX

CUSHION STROKES

A VERY young billiard player, a lady, by the way, once remarked that the cushions of a billiard table were most useful things because they prevented the balls from rolling on to the floor. Quite so, but the cushions have other uses, although billiards is sometimes played as if the point mentioned by the lady covered the whole of the utility of what our American friends call "the rails." Incidentally, the hard-hitting brigade who play in this manner often knock the balls off the table, especially if the cushions are hard and neglected, thus destroying the main value of cushions in the game of billiards as they play it, and penalizing themselves into the bargain, to say nothing of damaging the balls. There was a time, however, when this style of play, under certain

circumstances, found favour in the highest of billiard circles. The elder Roberts, we are told, once backed himself to give an amateur a very long start in a match for a considerable sum of money, and, as was usual in those days of heavy gambling, large amounts in side bets were at stake. When the game commenced, the wily amateur promptly played his ball straight into a pocket, thus running a coup and giving three points away. This left the old champion with only the red ball to play at, and as the game was played before the invention of the spot stroke and the modern "all red route," the prospect was not promising even for such a master of the cue as the elder Roberts. He could not reply with a safety miss in baulk because the start he was giving was so great that his opponent could afford to continue giving three away in exchange for a miss and then win with something to spare. On the other hand, an attempt to cope with the handicap by endeavouring to make breaks off the red ball alone

might well have ended in disaster, as the amateur played quite a useful game, and had the enormous advantage of waiting with his ball in hand ready to make full use of the numerous and favourable openings he might expect when the red-ball game broke down, running coups on a system as soon as the balls broke badly.

The modern reply to this type of billiard strategy is both simple and effective. After the opening coup, any professional and many amateurs would reply by a stroke from hand at the spotted red, which leaves a double baulk, quite a useful stroke, well worth working out for use on occasion. But the elder Roberts did nothing of the kind. Perhaps the tables and cushions were not fast enough in his day; so he solved the problem by smashing at the red and knocking it, together with the cue ball, clean off the table, a feat he could perform at will. At that time there was no penalty for forcing a ball off the table, except that the striker

could not score by the shot; and only the red ball was spotted, the cue ball remaining in hand. Therefore, the amateur found that he was simply making Roberts a present of points; his subtle strategy had been countered by a masterful hammer-stroke, and the old champion beat him with supreme ease. It is stated that this game brought about the introduction of a penalty for knocking a ball off the table, which appears highly probable, if only because the risk of injury to spectators and the unfortunate marker rendered it undesirable to encourage such firework displays in connexion with the game of billiards. Be this as it may, we know that for many years both the rules and the cushions have kept the balls on the table, and that as the game has emerged from its early and primitive state, continual improvements in cushions have been utilized by skilful players to such an extent that a study of the cushions is an indispensable portion of billiard education.

A pleasing and profitable phase of this

study, too often neglected by ordinary players, is illustrated by our photograph of a cannon made by "striking the cushion first," to give this class of stroke its popular designation. Strokes of this type are possible, even easy, far oftener than is generally supposed, but are frequently missed because due allowance is not made for the fact that the outside edge of the cue ball comes into contact with the cushion, thus bringing the point of cushion contact a good deal closer to the player than is indicated by a line taken from the centre of the cue ball. It is most necessary to make this correction when playing these strokes, and it is sometimes advisable to employ side to influence both the original angle of departure made by the cue ball after contact with the cushion and the subsequent direction of the ball after ball-to-ball contact has been established. The stroke now under review, for instance, is helped by a little "running" side. Played well, the stroke leaves the red over the corner pocket and sends the



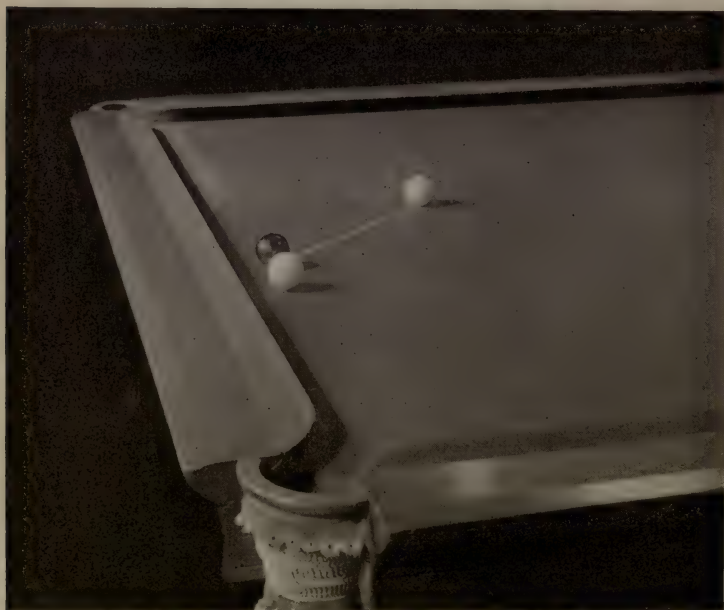
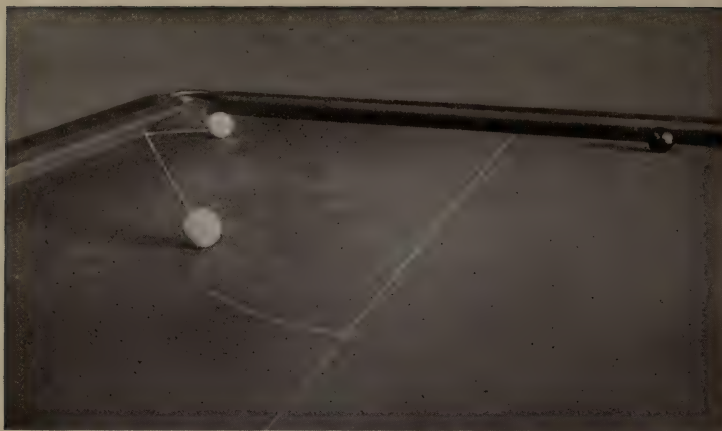
A SIMPLE CANNON

object white towards the billiard spot in excellent position for break building.

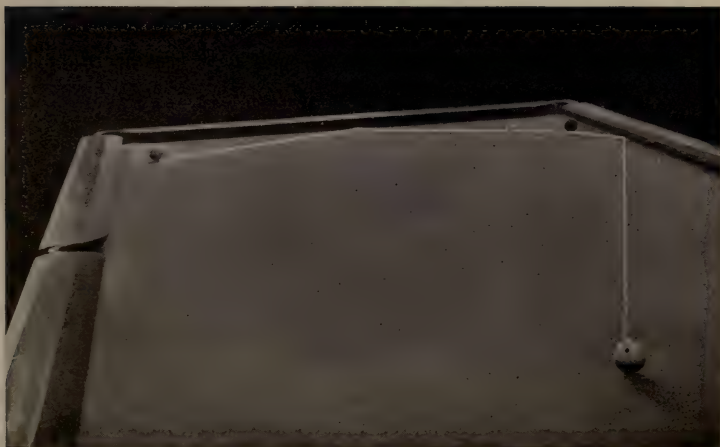
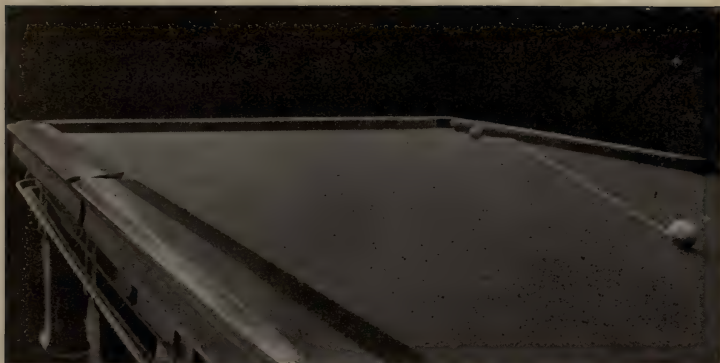
Our next stroke is similar to the last, except that the range is greater. It is not, however, really difficult, and should be made every time by a useful amateur. Occasionally losing hazards will be presented by slight variations of this class of stroke, and although the pocket opening always presents a smaller target than the second object ball, thus rendering greater accuracy essential, it is surprising how often these hazards can be made by those who trouble to study them. They are very valuable, often the sole means whereby the object white can be saved and position retained, and produce astonishing effects when played in conjunction with screw and side. As already explained in a former chapter, screw retains its peculiar properties after contact with a cushion, which renders possible the white loser shown in our photo. A good deal of screw and left-hand side is required, as the angle off the cushion is such that an

appreciable screw-back effect off the object white is essential to send the cue ball into the pocket; the strong side helps by tending to counteract imperfect ball-to-ball contact, thus making the hazard more certain. This is another stroke of the tactical description, as nothing could be easier than pocketing the white and arranging for a double baulk to follow. Everything depends on circumstances, dealt with at length when discussing the principle of safety play, and if an attempt to score is decided upon, the hazard as shown is undoubtedly the stroke to play.

We now pass to a cannon made by striking first the side cushion, then the red ball, then the centre of the baulk cushion, and finally the second object ball. This is quite a useful cannon, which should be played with sufficient strength to leave the red ball over the top pocket. Once again we have a stroke which serves to denominate a type. Variations are almost endless, especially when side is employed. Then an odd thing will be noticed, the



A DIFFICULT HAZARD (p. 263)
"FROM RED TO WHITE" (p. 284)



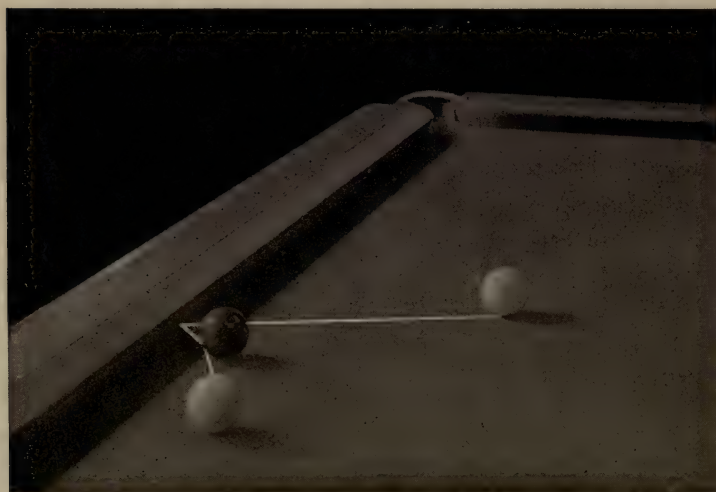
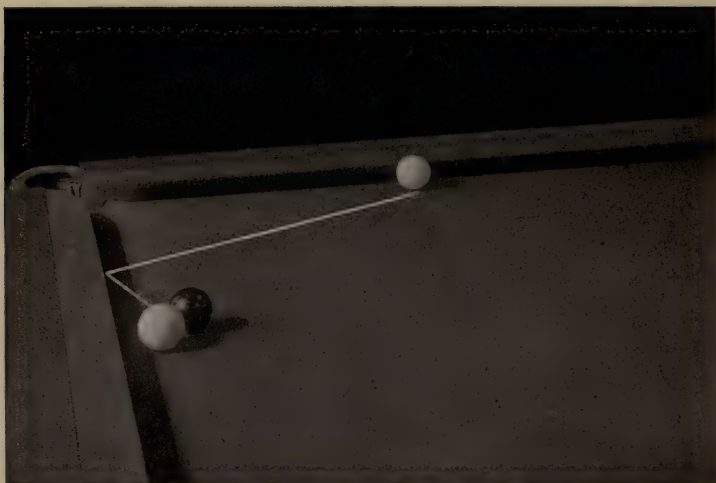
"AT LONG RANGE" (p. 263)

"QUITE A USEFUL CANNON" (p. 264)

cue ball seems to come off the first object ball with far more side than would have been the case if direct ball-to-ball contact had been established ; and there can be no doubt that appearances are not deceptive on this point—the cue ball glides off the cushion and spins off the object ball like a thing of life. The explanation is debatable. It is sometimes urged that the preliminary impact on the cushion imparts additional side to the cue ball, but this does not stand the test of scientific investigation, however well it may appear to describe the behaviour of the ball. A better elucidation of the problem is obtained by considering the forces acting on the ball from the moment of cue contact. These are the familiar forward rotation and the lateral spin due to the employment of side. It follows that the momentary check caused by contact with the cushion acts like a brake on the forward movement, and thus releases an inordinate amount of lateral spin. The ball is struck before this spin has time to die away, and as ball-to-ball contact is

always rather fine in these strokes, sometimes very fine indeed, the cue ball leaves the first object ball at a pace and in a direction which show that it is simply humming with side, more side than would have been evidenced by a ball-to-ball contact of the usual direct kind. This, however, is not due to any increase of side imparted by the cushion ; it simply means that the balance of two forces acting on the ball has been affected to the detriment of forward rotation, thus permitting a transient ascendancy of the other force, and conveying the impression of an actual increase of side.

Turning to another class of cannon, we find that it is often well worth while to play for a cannon via a cushion, even when a direct ball-to-ball cannon is perfectly feasible. Our first example of this kind shows the red some two inches clear of the top cushion, while the positions of the cue ball and second object ball show quite plainly that a screw cannon is easy enough for even a beginner. But the cannon from



CANNON—LEAVING BALLS TOGETHER (p. 267)

A SOUND POSITIONAL CANNON (p. 266)

the red to the top cushion and then on to the white, as shown in the photo, is positionally much more sound. The red is steered into favourable position over the top pocket, with the object white nicely placed at the head of the table. Our second cannon, also at the top of the table, is an even greater refinement. The direct cannon is so easy that it can scarcely be missed, except on purpose, which is the real idea of the stroke. By playing the cannon from the red to the top cushion and back to the second object ball, the best of position is ensured, whereas it is by no means easy to retain the balls in first-class position if the obvious ball-to-ball cannon is exploited. Sometimes the ball-to-ball cannon is "not on," when a stroke like that shown in our next photo may be played with advantage, the idea being to cut the red over towards the white, thus leaving excellent position when the cannon is completed. These cushion-cannon effects, when the cue ball is close to the first object ball, are often really delightful, and afford such an

exercise for judgment, touch, and crisp cuemanship that it is very interesting and instructive to practise them as a change from the natural angle losing hazards which are the backbone of the amateur's game. The main points of danger are that the stroke will just fail to materialize, thus leaving a good opening for an opponent; or that the stroke will be made in such a manner that the cue ball is left "hugging" the second object ball, with, maybe, nothing much to go at except a formidable masse.

Cushion cannons of a very different character now demand attention. These are the all-round cannons which have a peculiar fascination for the billiard public. Every player likes to make such strokes; their accomplishment is a source of undiluted joy to the amateur; but although the professor always gets a "hand" from the spectators when these strokes are made, yet he loves them not, partly because they are always more or less uncertain both as regards the score

and after position, and partly because the necessity for such a stroke is often indicative of that loss of positional control which heralds the ending of a break. It is curious to note how often one of the leading professionals will make a break of two or three hundred points without leaving himself a really difficult stroke, and then lose command of the balls, which he never seems to recover even if he manages to score a difficult all-round cannon or some other dazzling stroke. At the commencement of a break, if the professor has to force an opening off a difficult leave, he generally contrives, if he scores at all, to leave something which enables him to coax the balls into position. But he seldom does this after making a lot of points ; the flow and harmony of the break is destroyed, something has gone wrong with that marvellous continuity of accuracy which is the soul of professional billiards, and the break soon fizzles out to a finish. No doubt the sheer physical and mental strain has a good deal to do

with it. High-class professional billiards is much harder work than is often supposed, and it may well be that the great player is not nearly so fit after scoring, for him, a useful number of points as he is at the beginning of a break. The amateur has something to learn from this, even though he can never hope to make breaks of professional magnitude. His lesson lies in a due appreciation of the fact that the quicker a man plays the better he plays, always provided the rule is not pushed to an extreme. While a break is in progress the sight and attention of the player are not allowed an iota of relaxation; they are on the stretch all the time, and it follows that sooner or later a period of exhaustion must ensue which, even though it may be so slight that the player is not conscious of it, is nevertheless effective enough to tell on that absolute co-ordination of hand, eye, and brain demanded by billiards. It follows, therefore, that true billiard wisdom points to the supreme necessity of scoring as many

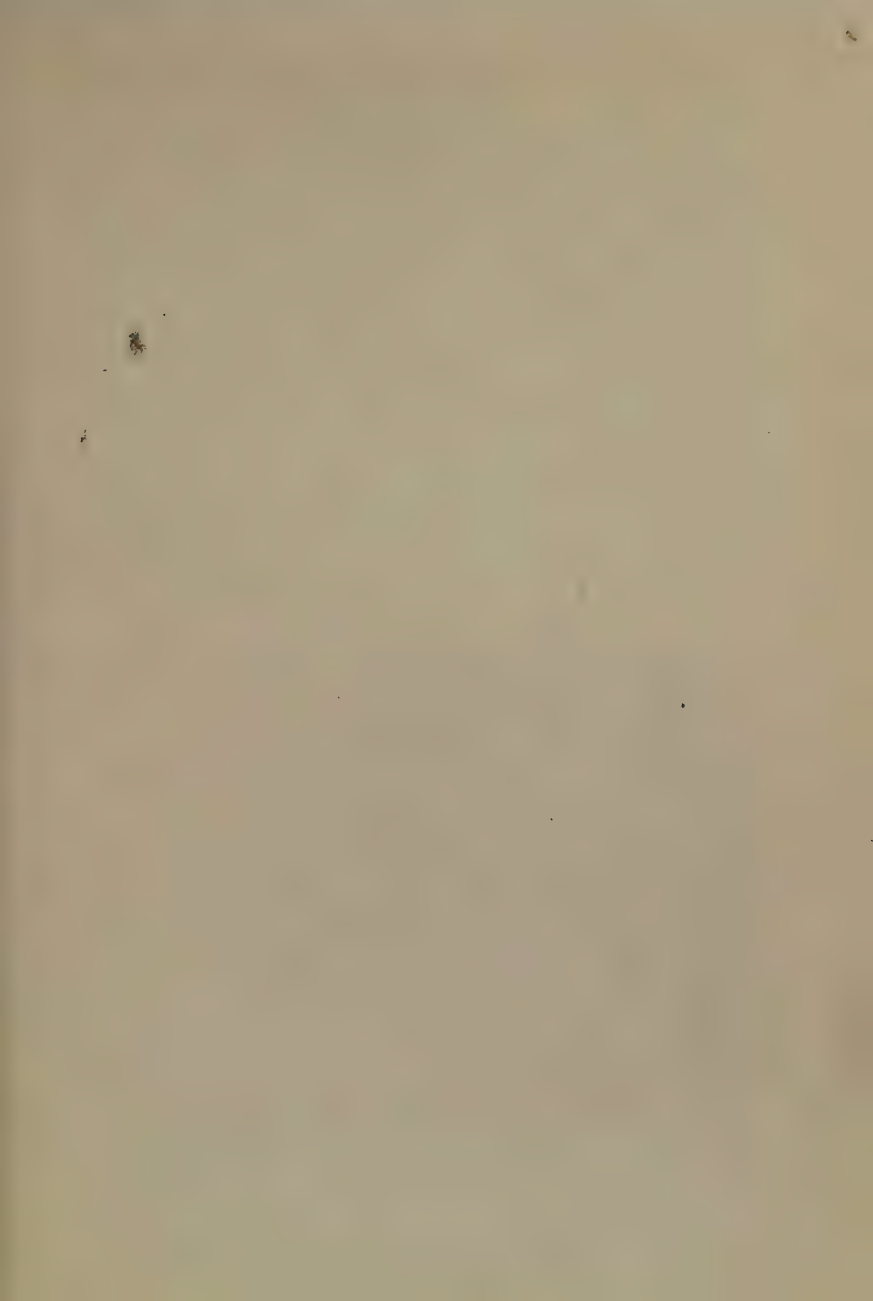
points as possible before this exhaustion makes itself felt. Add to this the nervousness felt by amateurs of every degree when a break begins to approach their personal record, and it will be seen that those who dawdle needlessly over their strokes, or who have cultivated mannerisms which waste time, are handicapping themselves to a very considerable extent. They have no reserve of power to carry them over that critical stage when the size of a break begins to get on their nerves, and consequently fail when they might have gone on if they had not wasted time at the commencement of the break; and when we reckon the points they might have scored during such wasted time, which is the most important consideration of all, it is undeniable that amateurs who are competent enough to take an intelligent interest in their break-building would be well advised to strive for the maximum of speed in scoring consistent with care and accuracy.

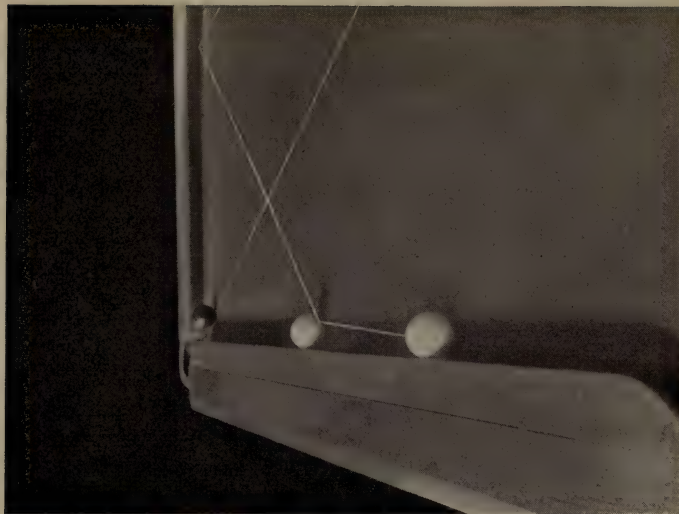
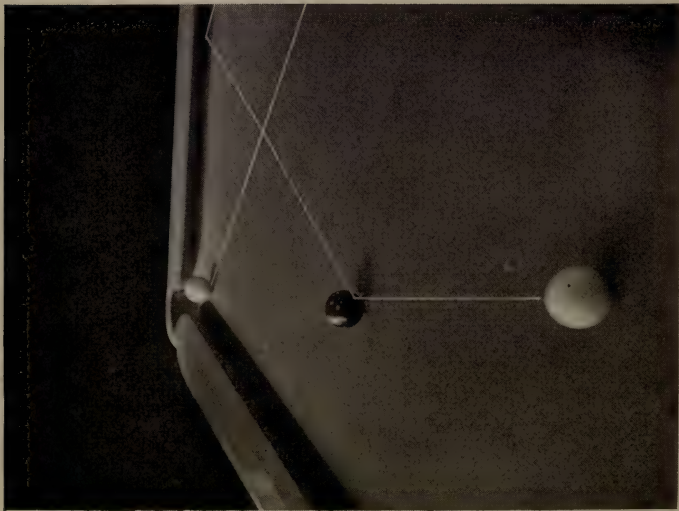
Returning to our all-round cannons, of

which the game affords an inexhaustible variety, it is obvious that the real secret of such strokes is to gauge correctly the first point of impact with a cushion. Once this is accomplished the mechanical angles of the table will do the rest, provided the pace is sufficient to bring the cue ball round. As a rule, running side is employed to facilitate the progress of the cue ball and help it off the cushions, and a rather high cue contact is also generally advisable. If a good deal of side is used, the effect on the angle will be considerable, and must be allowed for when determining the first point of contact between ball and cushion. Sometimes, as is the case in one of the examples shown, the first object ball is tight against a cushion, which increases the angle thrown after any given contact, and must be allowed for accordingly. Occasionally, screw effects enter into the problem, especially for positional purposes, when cannons off several cushions demand considerable cue-power. At their best, these all-round cannons are never

certain unless it is possible to play something closely approaching a plain-ball stroke off the first object ball, and even then they require a nice judgment of angles to be reduced to a virtual certainty. Altogether, they are strokes to be avoided as far as possible, especially as they are essentially foreign to the game of English billiards. They are seen to perfection on the pocketless tables in America and on the Continent. On our tables the pocket jaws often make these strokes next to impossible, and as so many easier and more reliable methods of scoring are available, it is safe to assume that the all-round cannon is no stroke for us if we can possibly play for anything else—safety, for instance—especially if the cannon is from white to red, thus facing a big risk of leaving the two object balls close together and well placed if the cannon is just missed, a possibility by no means remote even with the best of our players. In amateur billiards countless handicap games have been lost through

going “all out” for speculative cannons off several cushions, and as after position is often most uncertain even if the cannon is made, these strokes “give furiously to think” when it comes to choosing between attempting them or playing for safety.



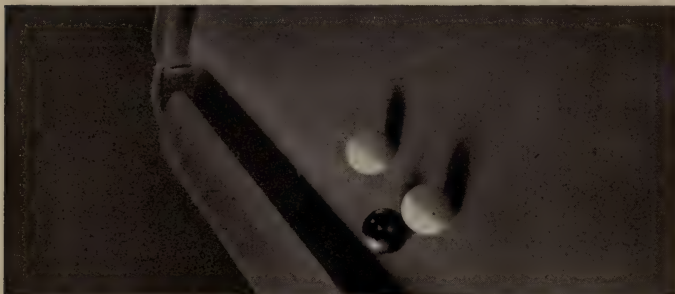


CHAPTER XX

“DROP” CANNONS—THEIR EFFECT

ALTHOUGH it is impossible to warn the average amateur too strongly against overspecialization in the top-of-the-table game, yet, as he must often play the “drop” cannon which brings the balls together at the spot end, he ought to study the best means of handling the balls when they are so placed, always keeping in mind the fact that he cannot hope to make a prolonged stay “at the top.” First, however, the “drop” cannon has to be manipulated. This stroke is playable from a variety of positions, but is generally played when a cueman finds himself with his ball in hand, the first object ball too far up the table for a loser into the middle pockets, and the second object ball—usually the red—somewhere in the vicinity of the spot or top

cushion and not open to attack from the "D." If the first object ball is well towards the centre of the table, especially if it happens to be the red, it is often better to stick to the open game and play the loser instead of the cannon; but if the loser is not tempting, or even if the object ball appears likely to kiss the other ball with dubious positional results, the "drop" cannon becomes inevitable. The main point to be considered is that making the cannon forfeits the tremendous advantage of playing from hand, an advantage the amateur should never give up if he can possibly retain it. Assuming, however, that the "drop" cannon has to be played, the idea is to make it in such a manner that the first object ball is directed against the side cushion and rebounds towards the second object ball, while the cue ball makes the cannon, thus "dropping" all three balls together. Strength is of great importance, as the desired position is absolutely unattainable if the stroke is handled too freely. At the same time,



CONSECUTIVE CANNONS (p. 279)

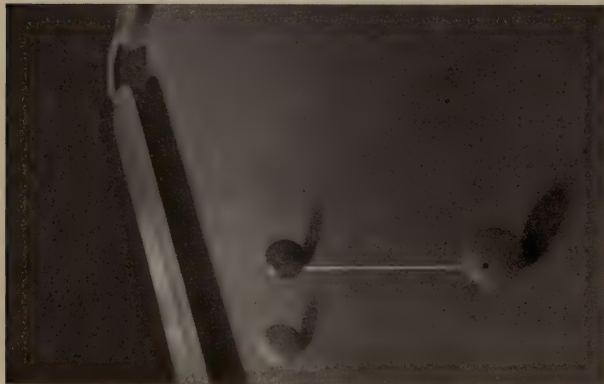
there must be pace enough in the stroke to make the cannon and steer the first object ball just where it is wanted. This is usually accomplished by placing the cue ball in the "D" so that the cannon is made by a ball-to-ball contact with the first object rather thicker than half-ball, which results in a semi-run-through effect, thus directing the first object ball as required, and also checking the pace of the cue ball. Side is helpful, but no great amount is needed; the main thing is to gauge both the pace and direction of the cue ball and the first object ball.

Having "dropped" the balls together at the top of the table, the amateur arrives at the parting of the ways. If he wishes to keep the balls at the spot end as long as possible, and wheedle the last point from them before returning to baulk, he should resolve to make a special study of this phase of the game, and must have the best of professional tuition before he can hope to make real headway. But if he plans his game with the idea of taking

what points are easily obtainable without worrying about retaining position at the "top," thinking more, in fact, about a return to the "D" at the first convenient opportunity, then he will find his well-played "drop" cannon an excellent and lucrative stroke. The great thing is to keep that return to the "D" ever in mind, to remember that he welcomes what the professor strives to avoid. With this idea fixed in his mind, the amateur, when he finds his limited knowledge of the close game fast failing him, should never hesitate about playing a bold stroke which leaves him a losing hazard, off the red for preference. He may have to play a short sequence of strokes to lead up to this result, and if his final stroke in manœuvring for losing-hazard position leaves him with the familiar natural angle loser off the spotted red, that most useful stroke from the vicinity of one top pocket into the depths of the other, he can say good-bye to the top of the table with a good heart, as this stroke must be badly



"A PLAIN BALL-TO-BALL
CANNON " (p. 282)



AN EVEN GREATER REFINEMENT " (p. 267)



"A FINE CLOSE CANNON "
(p. 282)

bungled if it fails to leave an easy losing hazard from hand into a middle pocket.

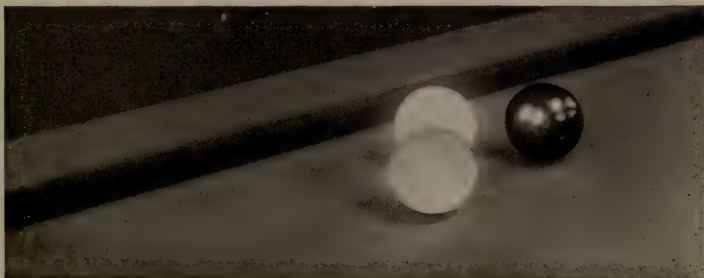
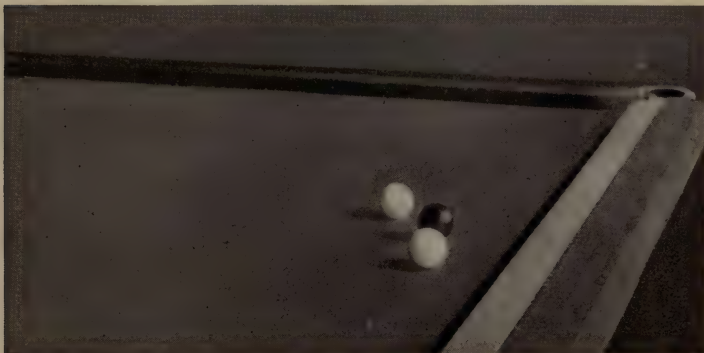
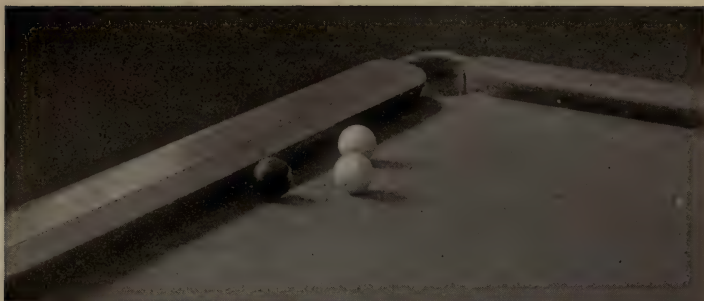
To begin with, we have set up a close cannon at the top of the table which would certainly lead to a sequence of nurseries in professional hands, but if the amateur plays a nippy stroke at the red, which makes the cannon and steers the coloured ball over the top pocket, he will be far better off in the long run than he will be if he manages to make a few close cannons before tumbling into hopeless trouble. Two most instructive strokes, which appear virtually identical, come next. They are consecutive cannons played by a professional at the top of the table. In the first example it will be noticed that all three balls are between the billiard spot and the striker, and the cannon is made with such judgment that the red ball zigzags gently off the top cushion into the position shown in the second photograph, while the cue ball makes a full contact with the white, thus driving it in almost a straight line beyond

the billiard spot. This full contact, in conjunction with beautiful touch and perfect cue delivery, brings the cue ball to rest on almost the exact spot previously occupied by the second object ball. Such a stroke is a mere commonplace detail in top-of-the-table billiards; a capable professional would make it with such ease and rapidity that it appears the most natural thing in the world to make the stroke in this manner. But a few trial shots will soon prove what a variety of effects the average amateur can produce before he manages to play the stroke to positional perfection, and will afford a practical insight into the difficulties of the close game at the top of the table well worth gaining, especially when due allowance is made for the fact that a stroke of this calibre is far more rudimentary than advanced. More often than not, in actual play, an ordinary amateur would handle this cannon in such a way that the red is left somewhere near the top cushion, with the cue ball

fairly close to the white. Another attempt to keep the balls close together by means of a slow fine cannon off the white, and it is a hundred to one that the amateur is in trouble. He had far better abandon all idea of the close game, and play a cannon back off the red via the top cushion, with sufficient force to send the red over the pocket, and clear the white well out of the way of the cue ball. It is instructive to notice the stroke which left the first of the two cannons dealt with above, and which is mentioned here out of its proper order merely to show that one must be prepared to make strings of such cannons before attaining anything approaching proficiency at the top of the table. Nevertheless, these three strokes are worth practising; they illustrate the true principles of the cannon game, and can do no harm provided that as soon as the requisite perfection of position is lost an immediate effort is made to engineer an opening for a losing hazard.

Sometimes, however, a short sequence

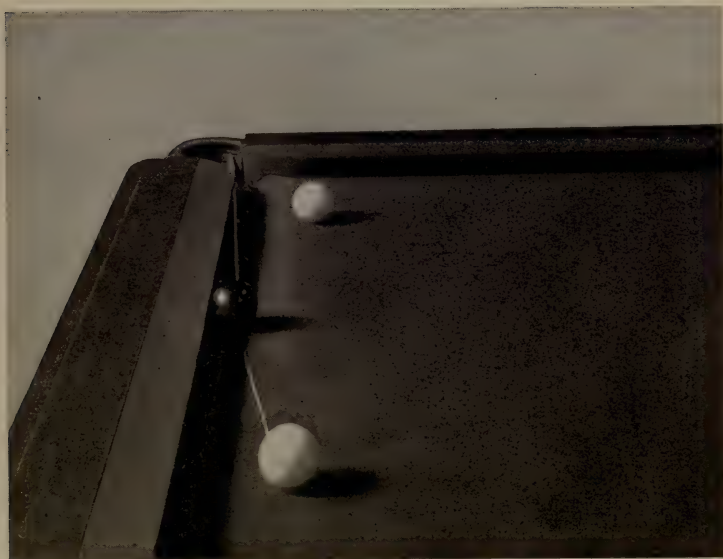
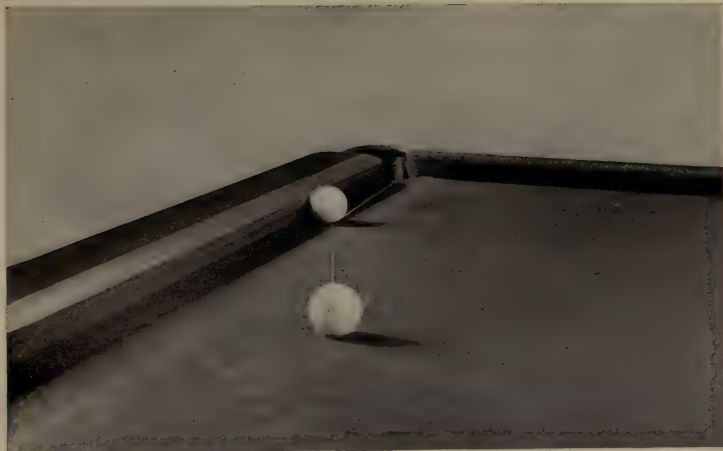
of cannons is forced upon the player, especially when a fine close cannon, like the one shown in our illustration, is presented. Then it is absolutely necessary to arrange for another cannon or two before the balls can be spread with advantage in accordance with the general plan of utilizing the quickest possible route to the open, all-round game. In spite of this general plan, there are plenty of strokes likely to be left by "drop" cannons which must be played strictly in keeping with the broad outline of the top-of-the-table game, even if the fine touches of the complete artist cannot be effectively introduced. For example, we have a plain ball-to-ball cannon near the billiard spot, and as the cue ball has a fair distance to travel for the class of stroke, it would be perfect billiards to direct the red towards the top pocket, at the same time cannoning on to the white with just sufficient force to drive it slightly down and across the table, leaving it in the best of positions for a cannon after the



"A SCREW-BACK OFF THE RED" (p. 283)
 "A CLOSE FOLLOW-THROUGH CANNON" (p. 284)
 "A NIPPY STROKE" (p. 279)

red is pocketed and spotted. This is the top-of-the-table ideal, but it is not realized unless the red is left in such a manner that it can be pocketed by a stroke which brings the cue ball into position to a fraction of an inch for the cannon. But the amateur does well enough if he leaves a losing hazard off the red when the cannon shown in our photo is made, although such a stroke would be far below form if played by a skilled top-of-the-table exponent. Alternatively, the amateur may contrive to leave a red winner which can be played to present the cross half-ball loser, care being taken to complete the cannon with sufficient strength to clear the white ball out of the path the cue ball must take when the hazard is played. Roughly, a similar playing sequence is offered by each of our next three strokes, although they differ greatly in character. One is a screwback off the red—better than a cannon off the white because it affords a sure and immediate means of directing the red ball along the top cushion towards

the corner pocket. The next is a close follow-through cannon from red to white, which must be played with enough freedom to bring the red well back from the side cushion and carry the cue ball away from awkward proximity to the white; the latter effect is produced by arranging for a fine contact with the second object ball, thus exploiting an important phase of cannon play which is constantly in evidence. Whenever a cannon is played it is most necessary to select that portion of the second object ball it is desired to hit for positional purposes, and there are few phases of the game which offer a better return for care and thought than this considered selection of the most profitable portion of the second object ball, when cannons mark the progress of a break. Our third cannon is from red to white, with the cue ball so close to the red, and the second object ball so far away, that correct top-of-the-table position is easily lost. But this does not trouble the amateur; he is content if he

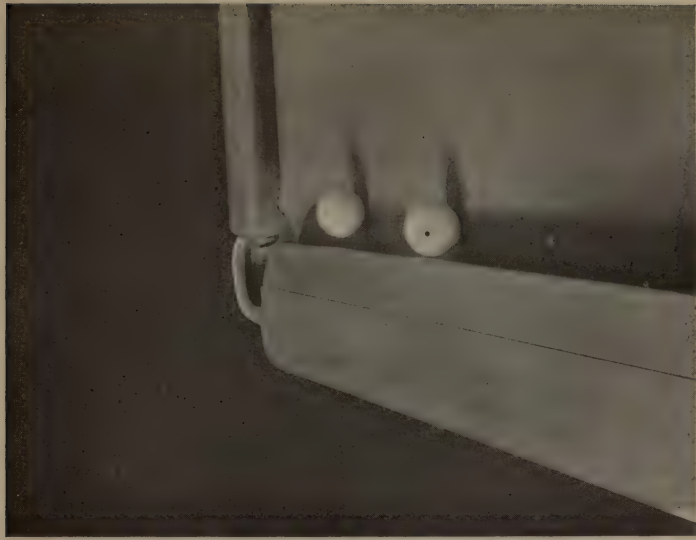
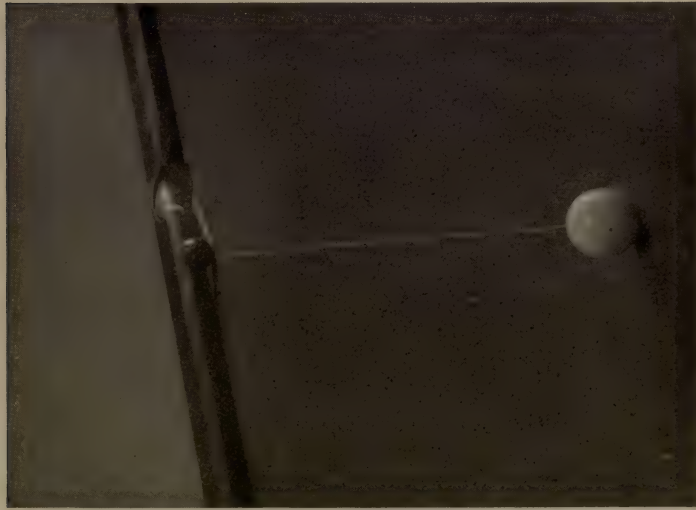


RUN-THROUGH STROKES (pp. 285-286)

can arrange to attack the red ball in his own way, even if by so doing he plays fast - and - loose with the laws of that winner and cannon combination exploited so cleverly by top-of-the-table specialists.

By way of a change from the delicate "tip-tap" billiards inseparable from even a few strokes at the spot end, it is a good idea to practise free, flowing, run-through strokes, and we will close our chapter with a quartet of these strokes. The first is a plain run-through off the white, quite an easy stroke if the cue swing is lissom and the ball-to-ball contact gauged correctly. Beginners usually make too fine a contact with the object ball, get "kissed away" time after time, and then conclude that the stroke demands rather more side than they can command with certainty. As a matter of fact, however, although a certain amount of side is helpful, it is possible enough to make the hazard without any side at all, and very easy indeed to miss it by striving to impart too much side. But a fair amount

of cushion side is most helpful when playing strokes like that run through the white along the top cushion ; and the further the cue ball has to travel, the more side should be used, the idea being that even if the cue ball bumps along the cushion before reaching the pocket, the strong side will make the hazard a certainty. A similar idea dominates the run-through loser off the red, which is instructive by comparison with the first run through off the white, and also because the second object ball comes into the picture just to show that the cannon is not the game. It will be found that plenty of side helps these strokes immensely, but they are not to be made unless the cuemanship is good enough to impart the requisite forward rotation as well as the side ; and once again it is necessary to emphasize the danger of too fine a ball-to-ball contact. The run-through loser into the middle pocket is a good test of cuemanship and the ability to impart strong side when playing a



RUN-THROUGH STROKES (pp. 285-286)

RUN-THROUGH STROKES 287

stroke at forcing speed. By placing the balls as shown, and playing full on the red with a powerful stroke which loads the cue ball with left-hand side, it will be found that the red ball is cleared out of the way, while the cue ball, humming with side, vanishes like a streak of light into the depths of the middle pocket.

CHAPTER XXI

THE TABLE AND ACCESSORIES

IN a book of this description no useful purpose can be served by entering into a detailed description of the technicalities involved in the construction of a billiard-table. The good points of a billiard-table are far more hidden than obvious, and although any player worthy of the name can appreciate them when a game is in progress, yet it requires an expert to distinguish them when the purchase of a table is under consideration. This is because inherent defects are not often immediately apparent in a new billiard-table. A cheap table usually looks as good as the best, except that its legs may be rather slimmer, and during a short trial spin in the show-room it may be depended upon to satisfy almost anyone except an expert or a very fine player. Then, no doubt, it appears

a great bargain at the price, but when it is sent home it soon proves to be anything but a good investment. Cushion troubles soon develop, the balls jump and run hard and dead at uncertain angles, the cloth wears coarse and scrubby, and then the table gets out of truth. After this it is one continual bother and expense, and is seldom or never fit for scientific and pleasant billiards.

The only way to avoid this is to pay a fair price for a table made by a firm which has a reputation to maintain. The extra initial cost saves money in the long run, but this is comparatively immaterial; what really matters is the difference between pleasure and annoyance, between a table on which real billiards can be played and a parody of a table which distorts the game and does not give playing skill a chance to show what it can do. The unhappy possessor of such a table is never able to practise on it with advantage, or ask his friends to play on it with pleasure. He does not like to discard it because of

the by no means inconsiderable outlay it represents, so he allows it to remain, seldom or never attempting to play on it, until at last it sinks into that most disreputable article of furniture — a derelict billiard-table. Remember, then, that the adage “cheap and nasty” applies with particular force to billiard-tables, and that the only safe course to adopt is to deal with one of the high-class firms whose goods can be depended upon. Every part of a billiard-table carries with it the impress of its origin. Unseasoned wood, coarse cloths, inferior slates, indifferent rubber, and poor workmanship, all go to the making of a “cheap” table; but the average man cannot be taught to detect these things at first sight, especially when they are glossed over by an abundance of polish and varnish. He must buy his learning, and he is wise if he decides to do business with a firm of such standing that it cannot afford to supply an unsatisfactory article.

Assuming, however, that a good table

is available, the first consideration is to house it properly. A specially designed room is always preferable, and a top light must be regarded as a necessity if it is intended to play by daylight. Such a light must be thoroughly well made, or it is sure to leak, and rain on a billiard-table is most decidedly water out of place. Of the various systems of artificial lighting, electricity is best, and the old-fashioned naked gas-burner easily the worst. But whatever the nature of the light may be, it is very necessary indeed to make sure that the lights are placed at a proper height, and never in such a position that a glare of naked light catches the eye of a player as he shapes at his stroke. This can easily be avoided by a proper arrangement of the shades, which are best fringed, and well repay a little care and attention. In some public rooms it appears highly probable that the shades are never touched from the time they are put on until they are worn out, which may pander to the weaknesses of a lazy marker, but has no

other point to recommend it. Shades should be removed and dusted inside and out at regular intervals, and it is also well to make a practice of attending to the lights on a system ; gas mantles especially require intelligent treatment to ensure the best results. In any case, it is desirable to make a practice of overhauling the lights by day, and nothing should ever be done to them unless the cloth is covered.

Ventilation is an important matter—far more important than is generally supposed. As a rule, a good deal of smoking takes place in a billiard-room, and the atmosphere may easily become distinctly foggy unless the ventilation is good. Electric fans are excellent things, and when a top light is available, an additional source of ventilation is also available. Here, again, the expert dominates the situation, and should certainly be consulted before a system of ventilation is decided upon. Much about the same may be said as regards heating, with the reservation that

BILLIARD-ROOM ETIQUETTE 293

an open fire should be avoided if possible, and always screened if absolutely unavoidable. The open fire has many and obvious disadvantages—it is next to impossible to regulate it at all satisfactorily, the room is always either too hot or too cold, the fine ash from the fire spreads all over the place, and, worst of all, unless a thick screen is used, the glare from the fire is most disconcerting to a player.

The door of a billiard-room should be placed behind the baulk end of the table, and fitted with a spy-hole to prevent people from coming in “on the stroke.” This brings us to billiard-room etiquette, concerning which a good deal of detailed information has appeared in print before now. Really, however, the main essential is merely to carry ordinary good manners into the billiard-room, and to remember that for the time being the room, and everything in it, are subordinate to the requirements of the players. Movement in the line of sight of a player who is shaping at his stroke is downright bad

form, and if it is necessary to carry on a lively conversation on an interesting topic, it is scarcely correct to do so in a billiard-room when a serious game is in progress between men who are battling hard for victory. On the other hand, it is hardly worth while to push things to such an extreme that the billiard-room becomes a solemn hall of silence, save for the click of the balls and the voice of the marker. After all, between amateurs, the game is only a recreation, and few men like to take their sport so seriously that even a chance word is frowned upon. Obviously, too, the ladies will never grace the billiard-room with their presence if the game is played with a needless excess of grave solemnity. The golden rule is that nothing should be done to distract the attention of the player, and providing this is observed, there is no need to transform the billiard-room into the sort of place best avoided by all except the keen billiard enthusiast. We must remember that billiards is essentially a game capable of

giving pleasure to many people at the same time, and that, unless the play is atrociously bad, spectators have a chance of witnessing really good sport. In fact, the game as a spectacle is so enjoyable that many people who seldom or never touch a cue like to watch the progress of a good game between friends, and it is surely undesirable to treat these excellent folk as intruders if they happen to laugh now and then, or pass an occasional remark which shows that they are interested in the billiards.

The marker is an institution by himself, and is first and foremost the exclusive servant of the players. It is the height of bad form to talk to the marker while a game is in progress, and he should never be asked to leave the marking board for a moment. No marker at all is preferable to that aggravating hybrid, the half marker, half waiter, too often met with in public rooms, and not altogether unknown in some clubs, who is always running away on some pretext or other just when the

players want him, and returning in most disconcerting style by the time the players have settled down to mark their own game. Before the hours of play the marker has to brush and iron the table, tip cues, and generally make the room ready for play.

But what, it may be asked, is to be done in a private house which does not boast of the services of a marker? There are many such, and as in these cases the work must be performed by ordinary domestics, sufficient detail to ensure its effective supervision may be given with advantage. As regards the general clearing up, that falls under much the same category as many familiar household duties, and may be passed over with the remark that no sweeping, dusting, or cleaning should ever take place in a billiard-room unless the table is covered up. The table itself must be first thoroughly brushed, with the nap of the cloth, beginning at the baulk and finishing at the spot end. This brushing must not be

scamped; it is no use gliding the brush over the table with more restraint than energy; the right method is to drop the brush smartly on the cloth, almost as if attempting to beat the dust out, and then carry it forward with a short, strong sweep which sends the bristles well into the nap. As the dust is swept under the cushions, it must be worked carefully towards the pocket openings and brushed clean off the table. When this operation is completed it is a good plan to cover the brush with a clean duster and go over the table again, thus smoothing the nap and clearing off any dust the brush may have picked up but not swept away. Whisk the duster round the wooden cushion rails, and the table is ready for ironing—*if it is necessary*.

It is a great mistake to suppose that because a table has been brushed it must be ironed as a matter of course. The fact is that the more a table is brushed and the less it is ironed the better it will be. Nothing spoils a cloth more quickly than

needless and injudicious ironing, usually done because the table is supposed to be "slow." Then on goes the iron, usually far too hot, and the desired end is presumably gained because for a short time the balls run quickly over the newly ironed surface. But one does not play billiards on a cloth like a silk hat; many of the finest effects in the game depend absolutely on the presence of nap in good condition, the very thing excessive ironing destroys. A table should never be ironed oftener than once a day; every other day should suffice in dry weather, but we must repeat that it is impossible to brush the table too frequently. In public rooms and clubs the tables should be brushed whenever an interval between games affords an opportunity, and if this were done there would be a great deal less grumbling about "slow tables." When, however, the table really does require ironing, the first thing to do is to make sure that the temperature of the iron is right. Above all, it must not be too hot,

or a valuable cloth may be ruined in a few seconds. The safest test is to press the iron steadily on a piece of white calico, and if it leaves a mark the iron is too hot, and should never be used until it is so cool that it will not make the least brown or yellowish mark on the calico. When the iron has passed this test it should be rubbed vigorously over a cloth to make sure that no grit or dirt adheres to it. It is then fit for use, and should be passed quickly but firmly in a clean swathe completely down the centre of the table from the baulk to the spot. The next swathe should slightly overlap the first, and the process is repeated until one side of the table is ironed. Then, of course, the other side of the table is treated in the same manner, and the process is complete. It should be finished quickly and neatly, and if it is done properly the cloth is smooth and green and a delight to the eye. If it shines too much, it is safe to conclude that the iron was too hot, and a very few such ironings will spoil the

nap, and make the balls slip and skid about instead of rolling properly.

Concerning cues, a man must have one of his own if he wishes to play at all well, and as some notes on cue selection have already been written, it is only necessary to give a few hints on the care of cues in general. Sandpaper will soon spoil the best cue ever made, and should never be used on the body of a cue under any circumstances. The leather tip may be roughened slightly with sandpaper or a file as often as a player feels that the cue-tip is slipping off the ball in spite of chalk, but the common practice of scouring the side of a cue with sandpaper is simply transforming the cue into firewood. It destroys the proportion and balance of the cue, scours it into all sorts of weird shapes, and should never be permitted in any billiard-room. If a cue feels rather sticky, as even the best of cues may at times if the weather is damp, a good rub with a dry cloth will soon put it in perfect trim, or a nice piece of crisp paper

may be employed instead of a cloth with equally good results; but sandpaper—*never*. Another common abuse of sandpaper takes place when a cue is re-tipped. Then it is quite usual to see both the leather tip and the point of the cue sandpapered and even filed to “make a neat job of it.” The consequence is that successive re-tippings soon bring the small end of the cue to a decided point, thus rendering it quite useless for accurate play. To avoid this, the leather tip should be selected with care so that it is very nearly a true fit before it is fixed, and can be made quite perfect with a little sandpapering and filing, which, however, must never touch the woodwork of the cue. It is something of an art to tip a cue properly, and if the local marker knows his work it is preferable to leave the job to him—unless the cue can be returned to the makers for re-tipping. Amateurs who wish to tip their own cues must first make sure that the end of the cue is flat, even, and free from the

remains of used wafers. Sundry mechanical appliances are sold which assist in this operation, and are not at all a bad investment. Having prepared the cue-end, the next step is to select a leather tip which, as already remarked, is as near a perfect fit as can be. With a little care and patience an amateur may often find an exact fit for his pet private cue among a box of tips, and as tips are so cheap there is no reason why this ideal should not be sought after whenever a private cue is tipped by its owner. The next stage demands the melting of a wafer in a little hot water; the semi-liquid wafer must be laid flat on the cue-end, and the tip at once pressed down on it firmly and evenly, the idea being to leave as little of the wafer as possible between the leather tip and the cue-end. Then the cue must be left until the wafer is thoroughly dry, when a few, a very few, finishing touches with sand-paper and file complete the process. Altogether, it is no job to run about after, and only the neat-fingered can

tackle it with any hope of success. Crooked cues are a constant worry, and if at all bad should be scrapped at once. If they are not too bad, the makers can straighten them, but prevention is, indeed, better than cure when applied to crooked cues. A cue should never be left leaning against a wall, and a private cue should be replaced in its case as soon as it is finished with; but the main thing is to guard against the great first causes of crookedness in a cue, which are cheap, unseasoned wood and inferior workmanship. Low-priced cues warp so consistently that it seems as if they never keep straight except by accident; but a good cue purchased at a fair price from a reputable maker will seldom warp out of truth, and if it does will always be changed for a new one free of cost. One thing is certain: it is no use trying to play billiards with a crooked cue. A good, straight, stiff cue is one of the primary essentials of the game, and a player should see that he gets it, and when

he has it he must take proper care of it.

The ivory ball is the standard article for billiards, and a first-rate set of ivory balls, although a most desirable possession, is by no means such a rarity as is often supposed. They are well within the reach of a man of moderate means, and quite passable sets of ivory balls are to be found in all public rooms and clubs in this country, except where economy and low prices justify the artificial ball. Quite good they are, too, are these composition balls, and far cheaper and more durable than ivory, but it is no use pretending they are anything like so pleasant to play billiards with. They are not, and never will be. Composition billiard balls are only good up to a point; they have their inherent limitations, those defects which are ever present when man seeks to imitate a natural product, and they cannot provide the champagne of billiards; the best they can offer is but a sound, honest wine fit for ordinary table

use. But this may be freely granted, good composition balls are a long way in front of ivory balls in indifferent condition; and if the cost of maintaining ivories in satisfactory playing trim is prohibitive, it is far better to adopt the composition ball than to try to play with ivories which are too foul to be depended upon. For all pool games the absolute truth of the artificial ball is a very strong point in its favour, so is its cheapness, as the number of balls required is fairly large, and when we add greatly increased durability to its other advantages, it is evident that the composition ball is fairly entitled to preference for pool games.

Composition balls suffer from one objectionable disadvantage—they pick up dirt much more readily than ivory balls, which means that they require to be properly cleansed at frequent intervals. If much pool is played every evening, the balls may be washed every morning with advantage. Warm water should be used, with just

a little of any of the soaps used for cleaning paint-work. No scouring is required ; the dirt drops off very quickly, but the drying process requires care. The balls should be wiped dry with one cloth, and then well rubbed with another very dry cloth. Treated in this way, composition balls will always give satisfaction for pool, and if they are used for billiards, similar treatment will give the best possible results. Ivory balls, however, must not be handled like this. They pick up little or no dirt on their beautifully polished surface, and an occasional rub with a smooth cloth will keep them in perfect order so far as their exteriors are concerned. Even during a game it is not a bad plan to rub an ivory ball lightly on the shirt sleeve ; it maintains that exquisite polish and complete absence from even a speck of dust inseparable from the best of billiards, and as most of the leading professional players cultivate this habit, there is perhaps more in it than meets the eye. When not in use, billiard

balls should be kept in dry bran, and if stored for a very long period they should be turned occasionally. Temperature has a decided effect on ivory balls; they should never be exposed to extremes of heat or cold, and are best seasoned for some time in a room before they are taken into play. When first used they should not be knocked about too much: it is better to practise gentle strokes, just tapping the balls to harden the outer skin before forcing strokes are played. Ivory balls well repay study and attention. In one club, well known for the excellence of its ivory balls, sets of balls were bought in the rough and kept suspended in a net under the tables in the club billiard-room, thus becoming thoroughly seasoned in the temperature they would experience during their playing life. When a new set of balls was wanted they were taken from the net and sent to the makers to be turned down and finished, returning slightly above standard size, thus permitting them to be turned down with

advantage as soon as they began to run foul.

It is impossible to close this volume without acknowledging the kind assistance rendered by Messrs. Burroughes and Watts, the well-known firm of billiard-table manufacturers, who were good enough to provide the table and admirable lighting facilities which proved invaluable to our photographer, thus enabling the text to be illustrated in a manner which cannot fail to assist amateur cuemen who feel that their game is capable of improvement.

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